

# AMERICAN AGRICULTURIST.

Designed to improve all Classes interested in Soil Culture.

AGRICULTURE IS THE MOST HEALTHFUL, THE MOST USEFUL, AND THE MOST NOBLE EMPLOYMENT OF MAN—WASHINGTON

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ORANGE JUDD, Proprietor.

## May Day.

"The waving verdure rolls along the plain,  
And the wide forest weaves  
To welcome back its playful mates again  
A canopy of leaves;  
And from its darkening shadow floats  
A gush of trembling notes.

Fairer and brighter spreads the reign of May;  
The tresses of the woods,  
With the light dallying of the west-wind play;  
And the full brimming floods,  
As gladly to their goal they run,  
Hail the returning sun."

PERCIVAL.

A thousand mingled associations cluster about the month of May. Poets of olden time sung of it as the "Flowery month of May," the joyous precursor of the "Merry month of June." On May-day—in common parlance, the first day of the month—the youngsters of both sexes, in Old and "Merry" England, gathered about their May-pole as an annual holiday, with jovial feats of strength, and exercise, and dancing, and rude play—often-times ending in fisticuffs, broken heads and bloody noses, among the swains in particular—which the poets in their halcyon lays have taken care not to chronicle. The girls gathered, and wove and braided wreaths and garlands of parti-colored flowers, with which they decorated their own sun-tanned brows, and flaxen hair, and the lads cut down boughs from the forests and hedges, stood them up in rows, or ambuscades, from behind which they played their coarse, practical jokes upon each other, either by individuals or parties, or made love by couples, as the fit or humor of the occasion invited. It was a rough and honest happiness for the time, in which the hinds and sweethearts of those days disported themselves—in most places long since in disuse, and in the few sequestered nooks yet left, continually going out of fashion.

It is a weeping month of the skies, too, in England. Gentle rains and sudden falling showers green up their early spring crops of barley, and oats, and beans, while the Autumn-sown wheat and the grassy meadows have already shot up their rank herbage into a gloriously promising harvest for the later Summer. The cows are lowing in the pastures; the foals are capering

around the fields, and cutting heinously threatening capers around their soberly grazing dams; while the young lambs on a thousand hills frolic in all the fullness of their innocent spirits, or lie clustered together by tens and twenties on the sunny knolls of the landscape.

It is not so in America. We have no May-day sports. Paas, Pinxter, Easter, and April fool's day are all passed, and May ushers in a month of sober toil, and workday reality. Our farm crops are already in, or rapidly going into the ground. Far away South, such work is fully done. Our middle States have got their seeds pretty much deposited—many of them up and growing; while far away North, the laborious ox, and sweating horse are in the midst and heat of plowing for receiving the seed, or busily drawing the harrow to cover it in. Double-trouble, toil-and-bubble are the order of the day, from Passamaquoddy to the peak-end of Florida; from the Red River of the North to the farthest shores of the Rio Grande—one everlasting, busy, toiling multitude of man and beast—freeman, slave and brute. Such is our working agricultural world through the month of seeding, culture, and hopefulness for the coming yearly harvest. We scarce give ourselves time to turn aside and watch the tiny, trembling flowers, as they throw out their soft, light, downy heads from under the leaves of the forest, or the grasses of the field, beautiful and fresh as they are, and vainly striving to win our attention. Melting showers and heavy rains are more welcome by far to the husbandman, and occupy his absorbed attention.

There are those, however, pursuing a vocation, like that of the first Adam, "to keep the garden and to dress it," who are quite otherwise engaged. They toil, and spade, and rake, and dig among a thousand brilliant woods, and plants, and flowers, which, though "they neither toil nor spin," yield myriads of delicious hues and odors and gratifications to our senses, in ministering to our cultivated tastes, filling out, equally with the more substantial productions of the earth, their delightful mission to us, in making up the great sum of Providential blessings with which we are surrounded. These may be termed the fine arts, and the poetry of the rural world, which, as the result of a part of our toil, minister only to the refinements of our leisure, and solace us with their almost overwhelming beauty and luxury, to compensate for the aching energy of our endeavors. Useful thus they are, rightly considered, equally with the absolute necessities of the ruder field culture, to fill up the sum of our enjoyment, and so should they freely receive their share of our attention.

There are many poor delving mortals, however, who have little part or lot in this delightful out-door world—the dwellers in the great, crowded commercial city, or in the hubbub of the hammering, bustling town. The song of the caged canary, robin, or mocking bird, has greeted them through the sunny mornings, as they glistened from

their imprisonment through the wires before an open window. The pots of geraniums, narcissus, and exotic roses have smiled upon them from their stands in the market places as they hurriedly passed—the only harbinger of Spring, except the bright glow of a fervid sun, as it melted, and almost fainted them on the heated sidewalk; while May-day opens upon them the clatter, bang, and rush of loaded drays, and troubled faces guiding and following them along the thoroughfares, as the dreaded one of all others—moving-day, in the city. Great times for the babies and children; toilsome and troublous, jolly and blithesome for the heedless servants, scullions and under-strappers; but woeful, anxious and deprecatory for masters and heads of families, who have all the risk, and none of the pleasures of "moving." And we—thank fortune that we are not, but—have been of them. Issuing from our sunny nook among the hills, where the broad shimmering of the distant water greets our first morning sight, among the songs of wild birds, and dewy grass, under the shriek of the locomotive whistle, surrounded by anxious and hopeful faces, on the same daily errand of life existence as ourselves, we hurry on to our toilsome, yet agreeable labor, and for the time, busy ourselves in our dingy apartment, among piles of papers, letters, and other written and printed missives, to entertain you, dear reader, in the best way we can, with the mental pabulum which is to cheer and help on your own possibly more useful endeavors.

City toil is our necessity; a country home is our mitigation; together they are our life. To the one we are obliged to resort as the Emporium, or gathering place from which we draw the streams of what little knowledge of every kind we impart to the farthest ends of our broad and teeming country; to the other we retire as our resting place, to restore our jaded energies, and gather strength for renewed exertion in your behalf. Could we have our own will, and want, the farm should embrace us altogether, and the city should only hold us long enough to get its indispensable supplies for our necessities, and we would "whistle o'er the furrowed land" as our daily pastime and pleasure. Our fields and our orchards, our woods and our meadows, our kine and our flocks, the cackle of our poultry yards, and the delights of our garden should altogether absorb us in our daily out-door vocation; while the domestic comforts and pleasures within should yield that calm and quiet satisfaction which the clamor, and avarice of the contending world of society, and business can neither give nor take away.... But we are homolizing. We started with May-day. If you, gentle reader, have sympathized with our own feelings, as we have hurried through this somewhat inconsequent talk, and have caught an idea to which your own feelings have responded, we shall be happy. If not, set it down that your editor, on this occasion at least, has been only dreaming in a way, at times, peculiar to himself—perhaps.

## Calendar of Operations for May 1858.

[We note down sundry kinds of work to be done during the month, not so much to afford instruction to practical men, as to call to mind the various operations to be attended to. A glance over a table like this will often suggest some piece of work that might otherwise be forgotten or neglected. Our remarks are more especially adapted to the latitudes of 35° to 45°; but will be equally applicable to points further North and South by making due allowance for each degree of latitude, that is, later for the North, earlier for the South.]

EXPLANATIONS.—*f* indicates the first; *m* the middle; and *l* the last of the month.—Doubling the letters thus: *ff* or *mm* or *ll*, gives particular emphasis to the period indicated.—Two letters placed together, as *fm* or *ml*, signifies that the work may be done in either or in both periods indicated; thus, work marked *fm* indicates that it is to be attended to from the first to the middle of the month.

## FARM.

May is quite as busy a month as April, for the farmer,—at the North even more so.—Nearly all crops not already in the ground require putting in at once, and before the end of the month, the hoes will be called into use.

No after labor can compensate for work poorly done now, and a future crop is mainly dependent upon well-manured and thoroughly plowed ground, good seed, and a judicious planting or sowing. We can not too strongly urge, now, at the planting season, a finely pulverized and deeply worked soil for the seed bed, whether it be a corn field, a potato patch or a grain lot. A few more bushels to the acre will pay for an extra plowing or subsoiling.

Beans, which are not as hardy as many other field crops, may be planted, *f, m.*; or even, *l*, for the kidney varieties. Cover the large kinds rather lightly or they will come up poorly.

Bees, will be swarming in some localities, *ll*. Have hives in readiness and watch them closely. See "Apiary."

Broom Corn—Plant like common corn or in drills, *f, m*.

Cabbages—Plant out early sowings, *f, m*. Sow, *ll*, for late planting.

Cattle—Working oxen require good tending now that their labors are heavy. Keep them from grass till Spring's work is over. Save the finest calves for stock, notwithstanding the butcher may offer ever so tempting a sum. A good calf is as easily and cheaply raised as a poor one, and the value of the future animal may be doubled.

Cellars are fruitful sources of disease if garbage and filth are allowed to accumulate for years. We trust, they were thoroughly cleaned and whitewashed last month. Open the windows daily for ventilation.

Corn—Read the article on another page. Use seed which has proved good. Failures may be planted the first of next month with King Philip or other quick growing varieties. Sow, *m, ll*, in drills thickly for soiling. As soon as planted stretch twine across and around the field to keep away crows. A few old barrels left in different parts of the field suggest ambushes to them. Bright tin dangling from a pole usually frightens them.

Drain wet lands whenever other labors will admit of it, and often when they don't. This should be a standing rule the year round.

Economy of the Farm—To drive business, be up with the sun. A late beginning usually makes a worrying day with an unsatisfactory amount of labor done at night. Have your own tools, and places to keep them in, that no time be lost in searching for them or in going to neighbors to borrow. Spend a little time to root out the stumps, old roots or large stones against which the plow has brought up for years. Leave no waste uncultivated places about the farm. The soil may as well produce a crop of vegetables as weeds. Set out a few shade and fruit trees about the buildings, and along the lanes and roads. Your wife and children will thank you for it in after time. There is economy in it too.

Fences—Keep stock of all kinds from becoming breechy, by providing good fences.

Grain—Sow, *ff*, any Spring crops mentioned last month and not already in, including millet, flax and hemp.

Grass Seed may still be sown with Spring grain.

Hoes will need scouring up in the corn fields by the latter part of the month in the South and Middle States.

Horse and Mule teams require good hard feed while under heavy work.


Manures—Do not omit the manufacture of them, although the yards have just been cleared. Cart in muck or loam for a bedding, and absorb all liquid or semi-liquid droppings of animals.

Meadows—Keep stock of all kinds from tramping over. Beat the cattle droppings with a "mall" constructed for the purpose. Sow plaster or ashes over old fields.

Onions were probably sown last month. They will need hoeing, *m, l*.

Peas—Sow, *f, m*, scalding any needing it to destroy the fly. We have tried pouring scalding water over them and allowing it to cool, with no damage to the germinating power of the peas, but with decided damage to the germs of a future crop of bugs.

Plowing is still going on briskly. Subsoil as many fields

as possible Remember  AN INCH DEEPER EVERY YEAR.

Potatoes—These were doubtless nearly all planted last month. Complete, *ff*. See article in last number upon the merits of different varieties.

Poultry will require little care now if running at large. Where shut up it is well to let them out for awhile about sundown, otherwise the quantity of eggs will diminish. Hens may still be set for late chickens.

Pumpkins—Plant, *f, m*, among corn and by themselves, both for table use and for stock.

Roots—If not done last month, sow carrots and beets for stock, *ff*, on rich and deeply plowed soil.

Sheep have lambs by their side, or are fast dropping them, and require care and good feeding. Washing and shearing may be done, *ll*, in some warmer localities.

Sorghum or Chinese Sugar Cane—Plant, *ff*, both for syrup and for soiling. It may be put in as corn, or what is better, though requiring a little more labor, drilled thickly in rows 3½ to 4 feet apart, to be thinned to 6 inches in the row, when well started.

Swine—The pens are supposed to be well stocked with young "grunters," which may properly have the range of the orchard if it is not under cultivation. Don't make them a nuisance, both to yourself and the neighbors, by turning them into the highway.

Tobacco—Plant from seed beds, *f, m*.

Tools, Machines, &c.—Now that mowing machines and reapers are coming into such general use, see if you had not better add one this season. Have carts, wagons and other gear in order, and purchase whatever hay and harvest tools are wanted, early in the season.

## ORCHARD AND NURSERY.

The orchardist doubtless so improved the mild weather of last month as to have his planting nearly completed now, excepting at the North where he is still busy. We have noticed that nurserymen have been pretty busy in filling the orders for trees. Many of them were unprepared for such a rush, and their stock, especially of standard pears, has been exhausted. The rage for dwarf trees has subsided and standards are mainly selected now.

Apples may still be planted, *ff*, although all trees should have been set out last month.

Budded Trees—Cut away the heads of seedlings budded last season, unless a failure is evident. Remove suckers.

Cherries—See apples.

Evergreens—The most appropriate season for planting these is at hand. We prefer for this locality, the middle of May for setting them, although any time in the month answers well. Remove them carefully, keeping roots shaded during the operation.

Grafting may still be done, *ff, m*, if the scions were previously cut, and are in good order.

Hoe nursery rows, *m, l*.

Inarching—Perform, *f, m*.

Insects—Destroy caterpillars before they spread over the branches. Search out borers, and wash young trees affected with scale.

Mulch newly planted trees, especially if the weather prove dry.

Old orchards will be improved by plowing up and manuring. Young ones are better kept under cultivation for several years with hoed crops, manuring the land liberally.

Peaches, apricots, nectarines, &c., should have been planted last month. If neglected put out, *ff*.

Pears—Plant, *ff*, if not previously done. Head back where necessary. See chapter V, orchard culture on a following page, and illustrations of pyramid trees, pages 115 and 116 last number.

Plow often among nursery rows, turning a furrow towards the trees at one time and from them at another.

Plums—Plant, *ff*. Cut away black knots.

Quinces—Plant, *ff*.

Seed Beds—Keep free from weeds.

Transplanting and Planting out of stocks and standards should be completed as early in the month as possible.

Water newly planted trees, if the ground should be dry.

Weeds—Keep down in all parts of the nursery and about standard trees.

## KITCHEN AND FRUIT GARDEN.

The vegetable gardener is now hurried with work, preparing grounds and putting in the remaining crops. Many of the directions for the latter part of last month are equally applicable to the first week of May, and operations not completed will take the precedence now. The work of planting should be hurried along, many of the vegetables succeeding much better when planted early. Those having but small plots of ground may so arrange their crops as to get large returns from little space. Of course the land should be manured in proportion to the returns expected from it. For example, a patch of early potatoes may be planted, and after receiving their last hilling, say by the middle of June, set cabbage plants between the rows, and after digging the potatoes the latter part of July

or first of August, sow turnips over the ground for a late crop. Again, radishes need take up no room of themselves. Scatter seed over the asparagus bed, in potato and melon hills, among beet and parsnep seed, &c. They are soon out of the way and scarcely injure the other crops. Lettuce and spinach may be sown between rows of larger vegetables, or on ground which will eventually be covered by running vines. Turnips or cabbages may be grown after early peas, or squashes may afterwards cover the ground.

Towards the middle of the month hoes will need scouring up by daily use, and the armies of weeds conquered, if a crop of anything else is desired.

Artichokes—If neglected last month, fork around old beds and make new plantations, *ff*.

Asparagus—New beds may be made, *ff*. Fork over old beds at the same time if not done in April. Sow seed, *ff, m*. Cutting will begin, *f, m*, or even earlier. Do not injure the young shoots in the operation.

Beans—Plant Limas and Kidneys, *f, mm*, placing the former on edge with the eye down. A good plan is to start a bed of them in a warm corner of the garden, and only plant out those which promise a vigorous growth.

Beets—Sow, *f, m*, or for keeping through the Winter, *l*. Hoe and thin early sowings, *m, l*.

Blackberries may still be planted, *ff, m*. Stake up old plantations.

Borecole, Broccoli and Kale—Sow and plant out, *ff*.

Cabbage and Cauliflower—Sow, *f, m*, for late use. Plant out, *ff, m*, from hot beds and cold frames if any remain. Scatter dry ashes over the seed rows to protect the plants from the garden flea. Hoe former plantings.

Carrots and Parsneps—Sow, *ff*, if not already in. Hoe and thin, *m, l*.

Capsicum—Plant, *f, m*.

Celery—Sow, *ff, m*, for late. Set early plants in prepared trenches, *f, m*, watering and shading.

Corn—Plant sweet varieties, *ff, m*, and *l*, to have a succession.

Cucumbers—Plant, *ff, m*, for early, and, *l*, for late use and pickling. Protect young plants from the striped bug, by frames, or dust with flour and black pepper.

Currants—Plant, *ff*. Use the wash water and chamber lye upon old bushes.

Egg Plants—Put out, *f, m*, or only when the weather has become settled warm.

Fruit Trees—Planting may still be done, *ff*. Train wall and espaliers rubbing off superfluous shoots.

Grapes—Rub off useless shoots, *m, l*. Keep well fastened to trellis or stakes.

Herbs—Set, *ff*, any remaining roots.

Hoe early plants, *m, l*, both to destroy weeds and loose the soil.

Hot Beds—Complete planting from them, *f, m*.

Kohl Rabi—Sow, *ff, m*.

Lettuce—Sow and plant from hot beds, *ff*. Sow at intervals of two weeks to keep a succession.

Melons—Plant and protect as cucumbers, keeping the different varieties by themselves if seed is to be saved. Otherwise they will mix. Pumpkins, cucumbers, squashes, &c., should be kept apart for the same reason.

Mushrooms—Make beds for Summer use, *ff, m*.

Nasturtiums—Sow, *ff, m*.

Okra—Sow, *ff*. Plant out former sowings, *m*.

Onions—Sow, *ff*, if not put in last month. Early sowing is essential to good bottoming. Put out sets and topset onions at the same time.

Peas—Sow Champion of England, or some other choice marrowfat, *f, m, l*, to form a succession with the Daniel O'Rourke and others sown last month. Stick when three or four inches high.

Potatoes may still be planted, *ff, m*, if they were not all put in last month. Put out sets of the sweet varieties, *f, m*.

Radishes—Sow at intervals, *f, m, l*, among other vegetables, or on ground, where late crops are to be planted.

Raspberries—Tie up canes, *ff*. Cut back long straggling shoots. Fork in a good supply of manure if not already done.

Rhubarb—Sow seed and plant roots, *ff*, although better planted in April. Keep ground light, rich and free from weeds.

Salsafy—Sow, *ff*, on rich, deep soil.

Seeds—See that roots spoken of last month are all out for a supply of pure home-grown seeds.

Small Salads—Sow, *f, m, l*, lettuce, cress, rape, mustard spinach, &c.

Spinage—Hoe and thin plants wintered over, saving a quantity for seed; sow, *f, m, l*, for successive use.

Squashes—Plant, *f, m*, as cucumbers, which see.

Strawberries—New beds may be made, *f, m*. Water in dry weather. Keep free from weeds.

Tomatoes—Put out early plants, *ff, m*, and sow seed at the same time for late use.

Transplanting—Much of this will require doing, *m, l*. Select damp cloudy weather before a rain, if possible; otherwise water and shade the plants after moving.



**Turnips**—Sow for Summer and Fall use, f, m, l. Early sowings will need thinning and weeding, m.

**Weeds**—Keep them down or they will keep the vegetables down.

**Winter Cherry (Physalis)**—Plant out, f, m, as tomatoes. Seed may be sown, f, m.

### FLOWER GARDEN AND LAWN.

A favorable and forward Spring has given an opportunity to prepare and plant grounds some two weeks earlier than last year. We suppose the operations calendared for April are nearly all completed. If these and former directions have been followed, such as planting out bulbs liberally last Autumn, the grounds appear inviting on this lovely May-day. Rich and delightful, both in color and perfume, is that pride of the gardener, the bed of choice bulbs. The snowdrop and crocus have passed away and the narcissus has a faded look, but hyacinths, tulips, fritillarias, crown imperials, &c., still make a fine show. The early blooming shrubs are also in flower, and Green Houses and Conservatories are lending their supply of showy plants to enrich the borders with a variety of colors.

**Annuals**—Continue to sow, f, m. Transplant from hot beds and green houses those previously sown.

**Asters and Balsams**—Sow, f, m.

**Bedding Plants**—Put out, f, m. We prefer a small bed of each of the different varieties, rather than massing them indiscriminately together.

**Biennials and Perennials** may still be divided and reset, f, sowing seed, f, m.

**Borders and Lawn Beds**—Keep neat and clean, often raking the ground among the flowers.

**Box and Grass Edging**—Set out, f. Clip old borders at the same time.

**Bulbs**—Beds of these still make a rich show. By keeping them shaded from the hot sun they will continue in bloom for two or three weeks longer. Keep down if needed.

**Carnations**—Plant out and also sow seed, f, m. Tie up flower stalks, and slit the sheath of those blooming upon the side.

**Dahlias**—Plant out, f, m, those started in houses and boxes last month.

**Daisies**—Divide and reset or plant out, f, m.

**Dianthus and Delphinium**—Sow seed and set roots, f, m.

**Dielytra**—Divide and reset, f. See description and illustration on page 152.

**Evergreens**—This is the best month for planting them. Set out, f, m, l. If this pleasant weather continues, planting may well be done, f. See chapters with illustrations in our last number and on pages 144 and 145 of this.

**Fuchsias and Geraniums**—Bring from houses, f, m, and plant in the borders. Keep well staked.

**Gravel Walks**—Renew old and make new, f, m. Keep well hoed.

**Hedges**—Set evergreen, f, m. Norway Spruce and Arbor Vitae are the most desirable trees for this purpose. Deciduous ones could have been put out last month. If not done, small ones may be planted with care.

Hoe often, or use the rake to loosen the earth among tender plants and to keep down weeds. The ladies garden fork illustrated on page 149, is a useful implement for this purpose.

**Honeysuckles and other Climbers**—Train to trellises or over arbors, keeping well tied. They may still be planted, f, although with less safety than last month.

**Hot Beds, Frames and Pits**—Plant out, f, m, anything remaining in them.

**Labels, Stakes and Dahlia Poles**—Have in readiness against the time they are needed.

**Lawn**—Sow with plaster, guano or bone sawings, or water with liquid manure if not done last month. Mow, m, l, and roll smooth.

**Mignonette**—Sow, f, m.

**Mulch newly planted trees, especially evergreens.** Leaves, sawdust, tan bark, old hay or straw spread around these, prevent from drying, and furnish a gradual supply of manure to be washed down to the roots.

**Pansies**—Plant out, f, m, sowing seed for a new stock.

**Petunias**—Plant out in masses, f, m. Sow seed at the same time.

**Portulacas**—Sow, f, m.

**Roses**—Plant, f. Bring from houses, f, m, and turn into a deep rich soil. Train climbing and pillar varieties. Destroy slugs preying upon the leaves by the mixture of whale oil soap spoken of elsewhere. Layer old wood, f, m.

**Stocks and Wall Flowers**—Sow seed and plant out, f, m.

**Turf**—Renew, f, any bare spots on the lawn or in the grass edging and walks.

**Verbenas**—Set out a good assortment, f, m. See the list given on page 51.

**Water newly planted trees and shrubs, especially evergreens, if the Spring proves dry.**

**Weeds** are in the wrong place, if among flowers. "Put them out."

**Zinnias**—Sow, f, m.

### GREEN AND HOT HOUSE.

Fire heat may now be nearly suspended, except in collections of tropical plants, and during damp, foggy, or cool weather. Abundance of air is required to harden the plants for a removal to the open ground. Some of them may be taken from the hot-house to the green-house, and afterwards to the open air, rather than carry them from a high temperature to exposed situations at once. Towards the middle of the month, the work of removal may begin, carrying out the more hardy first. Arrange them in a convenient, tasteful order, and screen from high winds. Some of them may be turned into the border for summer blooming, relying upon younger plants for flowering next Winter. Where the pots are placed on the ground it is well to put ashes under them to keep away worms and other insects.

**Achimenes and Gloxinias**—Keep in a warm situation, partially shaded.

**Azalias**—Water and syringe freely now that they are growing rapidly. Cut back straggling branches to form a compact head.

**Bulbs**—Plant out any still remaining in pots or glasses.

**Cactuses**—Syringe insects. Strike cuttings, f.

**Callas**—Water freely while in flower.

**Camellias** are now in a fine growing state, and need frequent waterings. Syringe the foliage, to keep down insects. Give them an airy situation.

**Carnations**—Take to borders, f, m; stake those in bloom.

**Chrysanthemums**—The stock may still be increased by cuttings, suckers and division of roots.

**Cinerarias**—Late ones are out in bloom, and need frequent waterings.

**Cuttings of Cactuses, Euphorbias and other succulents**—Make these, f, m, partially drying them before striking, as they will be less liable to rot.

**Fuchsias**—Plant out in borders, m, or shift those intended to bloom in pots. Water freely.

**Grapes** require care according to the degree of forcing they have received. Some vines may now show good sized berries or nearly ripe fruit and require little water, especially among the bunches. Others are later and need frequent syringings and pinching back. A portion may need thinning with scissors.

**Inarching**—May be performed on woody plants that do not root readily by cuttings, such as oranges, lemons, &c. See description and illustrations in last volume, page 184.

**Insects**—Allow no strongholds to become colonized at this season. It will be more difficult to dislodge them afterwards. Water and tobacco fumes will usually free the houses.

**Japan Lilies**—Shift or plant out. Tie up flower stalks.

**Layer, f, woody and herbaceous plants** to increase the stock.

**Oranges, lemons, oleanders and myrtles**—Carry to open ground and water frequently. Plant seeds for a stock.

**Pelargoniums** are beginning to bloom. Watch the appearance of the green fly and fumigate to destroy them.

**Roses** may all be removed to the open grounds, f, m. Increase the stock by cuttings, f.

**Water freely, both before and after removing plants from the houses.** Evening is the best time to apply it.

### THE APIARY IN MAY.

BY M. QUINBY.

Continue to examine the hives, daily if possible, to destroy what worms may be found. As soon as the bees cover the bottom of the combs on a cool morning, the front side of the hive may then be raised half an inch for the hot weather, unless they again get weak, when they should be let down. Where but few stocks are kept, it is quite important to continue the destruction of worms by all available means. Split elders, with a few notches cut across, and the pith removed, and laid flat side down under the bees, are very effectual. The worms will spin their cocoons in these, where they are so easily destroyed that it is almost no trouble. If neglected much over a week, till the moth matures, the bees are worse off than if you had not tried to help them.

Where stocks are strong, and the weather favorable for most of this month, swarms may be expected a little before June. Everything should be in readiness to have them as soon as consistent after issuing from the hive. The unpleasant sounds of the tin-pan, are all useless to charm them into a cluster—that is a natural consequence. All washes for the hive, to make the bees like it, are unnecessary. Let the hive be clean, and put nothing but bees in it: it should be rough, rather than smooth inside. It is immaterial by what manner the bees are got into the hive, providing they are all made to go in before they are left. It is much the best way to carry it to the stand, at once and raise the front side of the hive half an inch, and put up a shade to keep off the sun through the middle of the day for nearly a week. In operating about them, avoid all quick motions—a moderate movement is unnoticed, but a quick one resented.

### Convention of Agricultural Editors.

[The circular below was put in type and a proof slip sent to our exchange April 10, to give opportunity for an expressive opinion in the May issues of those Journals published monthly. To this date (April 20th) letters have been received from Frank G. Ruffin, who will be unable to attend in June, owing to a large harvest then coming on; and from H. P. Byram, cordially approving the plan, and preferring New York city, and middle of June. *Emery's Journal of Agriculture*, Chicago, says of the proposed Convention: "We are in favor of it, go in for it, will be on hand, do not care a fig where it is, provided it is previous to the first of September, and we vote for Rochester as the place for it. Why? Southern men want to visit Niagara, Canada will cross the line that far. New-Englanders want to see some good soil, and Western men are too independent to go more than half way to meet any body."

#### CIRCULAR

We have recently conversed with several of our brethren of the Agricultural Press, all of whom concur in the opinion that very much good would result, could the Editors of the several Agricultural Journals meet together, and spend a week or so in a discussion of some of the more important questions connected with *Soil Culture*. There is at present a wide diversity of views upon the subject of Chemistry as applied to agriculture; of the value and mode of applying several of the leading fertilizers before the community; of the comparative merits of prominent agricultural implements, books, &c. It is believed that these and other topics might well be canvassed by those to whom the community are looking for the most reliable information. Perhaps a majority of the News and Political journals are now devoting more or less space to giving agricultural intelligence and instruction, and the Editors would gladly embrace an opportunity to consult with those who make a speciality of this topic.

We speak in behalf of, and at the request of several others, in proposing that during the present season, there be held at some convenient point a general convention of all members of the press who are interested in the subjects of Agriculture and Horticulture.

Those we have conversed with, have indicated about the middle of June, as the most convenient season on several accounts. At that time a number of those residing at the South will be visiting the North, and it is a season of general traveling. Our several readers will be then so much occupied that a little less attention to our reading columns will not be so much regarded as at other times.

We have, personally, no partiality for any particular time or place. New-York city has been indicated as a central point, but we, for one, will gladly go to any place in the Union which will be the most convenient to the greatest number of those interested. If this city is selected, we will undertake to secure a suitable Hall for the convention, without expense to those attending, and further to provide as far as possible for the entertainment of the visitors, and we doubt not similar provisions would be made elsewhere.

It is proposed to bring this matter to a focus in the following manner: Let each editor of the agricultural or semi-agricultural press, in his next issue, express his views upon the proposition, and if favorable to it, name his preference for the time and place of holding such a convention, and at the same time nominate several gentlemen to act as a committee of correspondence and to make arrangements for a first meeting.

At an informal meeting of gentlemen accidentally brought together in this city recently, the following persons were named as such committee, the nomination to be subject to ratification or alteration, by the general expression of the Press.

Simon Brown, Ed. New-England Farmer.  
Luther Tucker, Ed. Country Gentleman.  
D. D. T. Moore, Ed. Rural New-Yorker.  
Thomas Brown, Ed. Ohio Farmer.  
Jas. C. Medill, Ed. Prairie Farmer.  
H. P. Byram, Ed. Valley Farmer.  
J. Jay Smith, Ed. Horticulturist.  
Samuel Sands, Ed. American Farmer.  
Frank G. Ruffin, Ed. Southern Planter.  
Daniel Lee, Ed. Southern Cultivator.

If this arrangement appears to meet with general favor these gentlemen will doubtless at once open a correspondence with each other.

To save time and correspondence, it is proposed that the above named gentlemen, and others, forward at the earliest convenience their views on the subject to the editor of the *Agriculturist*, New-York, who will act as temporary secretary and embody in a circular the substance of the letters and editorials received, and send an early copy to all interested.

New-York, April 8, 1858.

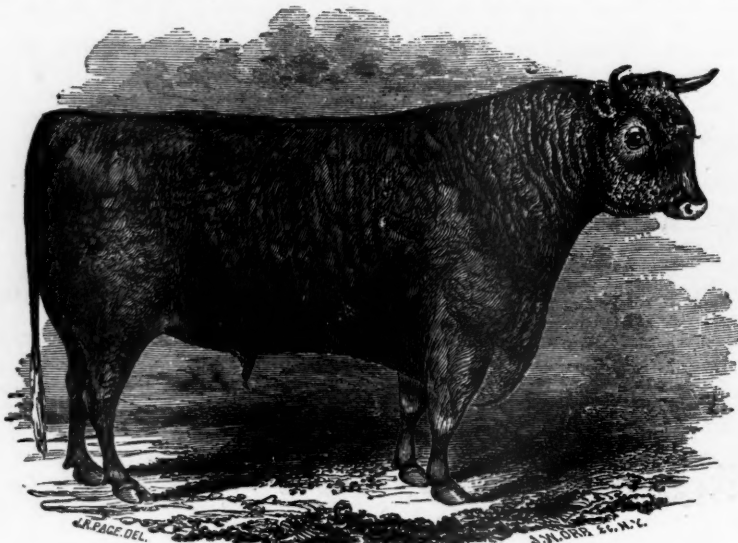
## American Cattle...III.

[Continued from page 77.]

## THE DEVONS.

What the turf horse, and its ancient progenitor the Arabian, is among horses, the Devon is among cattle. They are claimed in England as an aboriginal race, and to have existed in the island previous to its conquest by the Romans. Yet, from all accounts, the Devon has, from the earliest times, been confined chiefly to the county which bears its name, and the immediate confines of those adjoining, in the southwest of England. Nor does extraordinary attention appear to have been given to the improvement of the breed until the latter part of the last century, when the high prices, and great consumption of native beef in Great Britain, to feed her armies, having fearfully drained her cattle districts, awakened the attention of the few breeders of Devonshire, who still held their cattle in their original purity of blood, to their extraordinary value. The northern part of that county appears to have been their favored home. The soil and climate eminently suited them, and with the care and attention bestowed upon them by their breeders, for the past sixty or seventy years, they have improved in quality, appearance, and blood-like style, until they can be mistaken for no others with which they have any relation. The wild deer of our forests have no stronger marks of original descent than the well-bred Devons of the present day; and in uniformity of appearance, and identity of blood, they are scarcely more homogeneous.

An idea has prevailed to a considerable extent, that the red cattle of New England are essentially Devons, from the fact, that the first settlers of Plymouth came from Devonshire. There is no sort of proof in that, for no cattle were imported into New England until four years after the arrival of the Mayflower, and neat cattle were imported from all parts of the coast of England to the new colonies when an active communication had become established between the two countries. At all events, the New England red cattle are exceedingly unlike the well-bred Devons of the present time, and only resemble them so far as their approach to the same color, sprightliness of action, and an upturned horn are an indication. An occasional well-bred Devon may have been imported into New England during the last century, and left an infusion of its blood in certain neighborhoods; but nothing like an established herd of the kind has been known there until within the last thirty years. The first animals—six heifers and a bull—of pure North Devon stock, in the United States, of which particular note has been taken, were imported by Mr. Robert Patterson, into Baltimore, Maryland, in the year 1817. A few more were imported into New York, by the late distinguished statesman, Rufus King, of Jamaica, Long Island, about the year 1819—both from the fine herd of the late Earl of Leicester, then Mr. Coke, of Holkam, in the county of Norfolk, England. A few years afterwards, some of Mr. Patterson's stock were taken into Connecticut, and successfully bred. In 1835, the remainder of the Patterson stock went into the hands of Mr. George Patterson, of Sykesville, Maryland, who has skillfully bred them, with occasional importations of a fresh bull, up to the present time. Mr. King bred his stock, occasionally parting with an odd animal, until his death many years ago, when his herd was broken up and dispersed. These were all well-bred cattle, originally procured in Devonshire by Mr. Coke, who considered them admirably adapted to the light soil of his extensive estates in Norfolk. From the herd of the Messrs. Patter-



DEVON BULL—FRANK QUARTLY

son, many animals were distributed into various parts of the country. About ten years ago, and since, at various times, several enterprising cattle breeders made selections from the best herds in Devonshire, and brought them into Massachusetts, New-York, Georgia, and the Canadas. They have been eminently successful here, and now several herds exist, of purity in blood, and high quality—not excelled, even in England. The Devons have thus become an established breed of cattle in the United States, and in Canada.

## DESCRIPTION.

The pure North Devon is medium in size, and less than the short-horn, or Hereford. They are red in color—originally, a deep blood red, but latterly, they have in England bred them of a lighter shade, but still a red—a fancy shade, merely, the other characteristics remaining the same. The head is short, broad, and remarkably fine, with a quick, lively, prominent eye—encircled with an orange colored ring; and a slender, branching, upturned horn. The neck is fine, with little tendency to dewlap; the chest full, with a slanting shoulder, more open of late than formerly; a straight back, with full round ribs, well thrown towards the hips, and a projecting brisket. The loin and hips are broad and level; the rumps in good proportion, and the tail well set, round, and tapering like a drumstick into a tuft of mixed white hairs at the end. The flanks are deep, and level; the thighs somewhat rounding above, and running into a graceful taper at the hock, with a leg below of surpassing fineness and strength. The forearm is large above the knee, but below, the leg is exceedingly fine and muscular. A patch of white is occasionally found at the udder, and in rare instances extending forward to the navel, but in a majority of cases, perhaps, the white does not occur. Taken altogether, no animal of the cattle race exists, which in uniformity of color, style, symmetry, and blood-like appearance exceeds the Devon.

## AS A BEEF PRODUCING ANIMAL,

no creature of the race on this side the Atlantic equals it in fineness of grain, delicacy of flavor, and economy in consumption. Its fineness of bone, and freedom from offal make it a favorite with the butchers, and a choice to the consumer. In England it is preferred to any other beef excepting only the Galloway and Highland Scot, and bears, excepting those, the highest price in her

markets. He matures early—hardly so early, perhaps, as a Short Horn—but at four years old is fully ripe for the shambles, and at three, good. He is a kind and quick feeder, with finely marbled, and juicy flesh, and no bullock makes better *proov* at the shambles.

## AS A WORKING OX,

he excels, according to weight and size, any other known. Even in size, the ox is full medium, his solidity of carcass and muscular strength amply compensating for his apparent deficiency in bulk. For activity, intelligence, and docility he has no equal, and long experience has proved that where working oxen are in demand, an infusion of Devon blood adds largely to their value, both in price and performance of labor. They match readily, both in color and shape, the deeply concentrated blood of the bull imparting his color uniformly to his progeny. Their movements are quick and agile. They walk almost with the docility of the horse, possessing both wind and bottom. In short, the Devon is the *beau ideal* of a working ox, and as such, will always hold a pre-eminence.

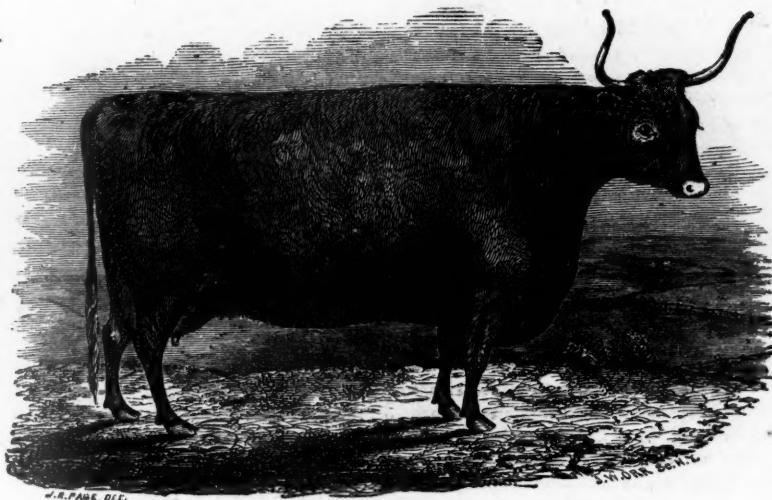
## AS A DAIRY COW,

she is full medium, when milk is made an object with her. For breeding purposes solely, as with the Short Horn, her milking capacity has been too often sacrificed for the benefit of her appearance. Naturally the Devon is a good milker. We have often seen Devon cows yielding twenty four quarts of rich milk a day for weeks together on grass only, and making a corresponding weight of butter. They are kind, and gentle in temper, and with the milking quality properly cultivated, they are, according to their weight and consumption of food, equal to any others. They have so proved in England—we know it to be so in America; and coupled with the manifold excellencies of her stock, no cow can be more profitably kept as an economical animal, either in the farm dairy, or the village paddock.

## WHERE SHALL THE DEVON BE KEPT?

There has been much controversy among cattle breeders on this point. Our Western breeders and graziers, although they admire their beauty and symmetry, contend that the Devon is too small for their rich lands and huge corn cribs—the Short Horn is better. We will not dispute that conclusion, well knowing the partiality of good stock feeders for large size, and corresponding consumption of food. But for the medium,





DEVON COW—BIRTHDAY

and lighter soils of the country—and the richest also—in all its variety of climate, no beast is better calculated to win its way to success and favor. From Maine to Georgia; from the Atlantic shore to far beyond the Mississippi, the Devon thrives, and is a favorite with its keepers. On hills, or in valley, with scanty herbage, or a luxuriant growth, with anything like Christian treatment it will thrive, and do its duty.

#### "Beware of Eastern Tennessee Lands."

To the Editor of the American Agriculturist.

I notice with some regret an article in the April *Agriculturist*, referring to the wild lands of Tennessee, for although you only give the statements of a subscriber, which may all be very true in that case, yet they may be the means of inciting an interest which will surely be taken advantage of by sets of speculators, who are attempting to palm off large worthless tracts of land, not only in Tennessee but elsewhere. Let me give you an illustration.

During the past year, a man from Eastern Tennessee visited Brooklyn, and with the aid of a surveyor here, and certain specious statements, induced a number of us to believe that there was an opening for a pleasant and profitable investment in homesteads for ourselves and friends. A letter, purporting to be from a resident, setting forth in glowing terms his success and prospects in that region, was printed in a circular form by the said surveyor. Some twenty of us (including "stool pigeons") united together and contributed funds to send a man to investigate the matter. Our "surveyor" was of course selected. He came back with the report that he had visited the very land of Canaan, of which the "half had not been told." Well, arrangements were being entered into to purchase a single tract of over 10,000 acres, at \$1 per acre, through him.

But as good luck would have it, our "agent" rather overdid the business, and a suspicion was aroused that he was "feathering his own nest." Before paying over the money to him, we finally concluded to "investigate" farther, and for this purpose secured the services of an experienced old Long Island farmer, and despatched him as a second agent to "spy out the land." Without entering into details, suffice it to say, our new agent brought back word that our ten thousand acre tract could be had for 50 cents per acre, and was not worth a sixpence—that the more of such land

a man had for farming purposes the worse he would be off.

Our experience has cost us some blasted hopes, and a little money, but we are glad to get off so cheaply as we have. We hope this bit of history of one transaction—and we learn that it is only one of many of like character—may be the means of putting others on their guard.

ONE OF THE HUMBLED.

Brooklyn, L. I., April 15th, 1858.

#### REMARKS.

We are obliged for the above communication. We have no doubt but there are very many fine tracts of land, which need only to be known to be taken hold of, but we commend the example of the Brooklyn Company to every one looking after them. No one should invest his property, and fix a homestead, without first examining the locality *with his own eyes*. He is foolish if he does otherwise, and, we had almost said, *deserves* to be fleeced.—Ed.

#### Dear Land and Emigration.

A correspondent of the *Country Gentleman*, in noticing our experiments with the Ashcroft and River's Swedish Stubble Turnips, wants to know why we do not emigrate. It will be recollected that the writer took the edge of a marsh, drained it, and raised at the rate of nine hundred bushels to the acre without stable manure. The spot, we admit, was unpromising, and the turnips in better land would probably have yielded a larger crop. But we think nine hundred bushels to the acre is not so poor a remuneration for one's labor that he has occasion to turn his back upon the home of his fathers and seek a new one in the West. We believe that the advantages of the East and the West are so evenly balanced that no farmer has occasion to emigrate except from choice.

For many it is decidedly better that they should remain where they are, clearing off rocky land, draining swamps and marshes, turning wastes into meadows, than to seek farms ready made upon the prairies. There are thousands of acres of these unimproved lands in almost every county of the Eastern States, in the immediate vicinity of good markets, that only want capital and labor to make them largely productive. They are in the midst of civilization, within sound of the church-going bell, and within sight of the school-house and the post-office. The country is made up, and the farmer has not to be taxed a fourth part of his earnings to make roads and

bridges, to build court-houses and jails, and to furnish society with the necessary fixtures of civilized life. All these things have been attended to by former generations, and the farmer has nothing to divert him from the luxury of cleaning up his farm and making the rough places smooth.

The swamp and marsh lands especially can be easily made productive, and pay for their own improvement. We have a few acres of this kind of property, that has lain waste from the foundation of the world, that we have determined to improve. We want to finish the job before we emigrate.

#### An Early Plot of Beans, Corn, &c.

The fine weather during the early part of April, and to the time of this writing, April 20, has induced many persons to nearly complete making their gardens, and put in many field crops much earlier than usual. Considerable anxiety has been felt, however, lest a late frost should cut down some of those not hardy. There has been so little cold weather the past Winter, that the ground has not lost as much heat as usual, and from theoretical considerations, we shall scarcely look for any severe frosts this Spring, though "all signs fail in dry weather," and it is safer not to be in too great a hurry in planting corn, beans, and such like crops that may be ruined by a cold snap, or a single night's frost.

We commenced this item, however, to suggest a mode of securing a few early beans, a small plot of corn, cucumbers, melons, &c., where the plan recommended, page 100, has not been adopted. Take Beans for example. We may plant them at once, in hills at the usual distance. Then a week or two later, extra hills may be put in between those first planted. If the weather continues mild, the first plantings will grow and give early returns, and the second planting may then be dug up like so many weeds. The only loss will be the small quantity of seed. But if on the other hand, a frost should chance to cut down the first planting, you then have the second as a reserve. Very often, owing to long rains and other causes, the later planted seed will shoot ahead of the earlier, in which case the weaker plants may be removed and give place to the stronger.

These remarks apply to corn, melons, and indeed to all of the tender vegetables. The extra seed required, is scarcely to be considered, in comparison with the value of having a chance for obtaining an extra early crop, without risking a later one.

HUMOR IN AN AGRICULTURAL SOCIETY.—If we are to credit the Springfield Republican, the managers of the Amherst (Mass.) Agricultural Society enjoyed a bit of fun in making up the committee on stock for their cattle show. If the several boards of judges do not perform their duties well it will certainly be no fault of the managers.

The Republican gives the following examples: "The Committee on Cattle, upon the principle that 'he who drives fat oxen should himself be fat,' was composed of eight gentlemen whose aggregate weight is over two thousand pounds! Then the committee on calves (most impudent selection!) was wholly composed of members of the last Legislature. The committee on fowls were gentlemen from several towns about here, all of them blessed with the name of Fowle. But the happiest thing, and one that really had a good grain of satire in it, was the committee upon maple-sugar. This was made up of 'sweet hearts,' three ladies and three gentlemen, who were known to be engaged to be married, being upon it."

### Experience in Potato Culture.

To the Editor of the American Agriculturist:

This root is one of the most common crops of the American farmer, and almost every one pretends to know all about it. But to raise superior potatoes, we have much to learn yet, especially as regards its proper treatment to ensure a large crop, even under favorable circumstances. Here the question presents itself—how many bushels is a large crop? This depends much upon the kind, all other things being equal. The best kind, such as the Mercer, is comparatively a small bearer. I think that for the middle of Pennsylvania, 200 bushels per acre of Mercers would be a very large crop. One thing is sure, that half that quantity is more frequently obtained. I could never come near 300, much less 500 or 600 bushels, as is said to have been raised from one acre. Whether that is only paper farming, or whether we common, hardworking Dutchmen are too stupid, I am not ready to say. But I would much rather see it, than hear it said. I am here speaking of Mercers only, and when I have 200 bushels, I consider it a full yield from an acre.

I prefer corn-stubble, well manured, and plowed 12 inches deep, and deeper if possible, then well harrowed. If cloddy, a roller is run over the ground, and again harrowed, so as to start with a well pulverized soil; then marked out with a light plow, 3 feet apart, and 4 or 5 inches deep, and covered with a hoe, from 3 to 4 inches deep. The planting is done as early in the Spring as circumstances will admit.

When the first young weeds make their appearance, a light harrow is run over the ground to destroy them. This is done as often as weeds make their appearance, till the potatoes themselves show above ground, when in a few days the rows will be sufficiently marked by showing a bluish streak of the young tops. The plowing is then done, throwing fresh ground up against the row on both sides at once, with a corn plow. Some will be covered, but that does no harm, for in a few days they work their way out again. If any ground is left undisturbed between the rows, the cultivator is run through, and the weeds between the hills are destroyed with the hoe and the hand.

By this mode of after-culture, the little spongioles are not disturbed. If the plowing is left till the vines have made considerable growth, it often does more harm than good, from the fact that the plow cuts many of the young rootlets which assist in drawing on the soil for nourishment. I have seen potatoes plowed when they had already gone into blossoms; in such cases they had better be left altogether without plowing.

J. S. KELLER.

Landingsville, Pa.

### The Peach Blow Potato.

To the Editor of the American Agriculturist.

The potatoes in the Buffalo Market last year were generally inferior in appearance and quality; the best during the Spring and Summer being brought generally from the vicinity of Rochester eastward, or the new lands of the Western States. As my father, of Onondaga County, had for several years raised the Peach Blow potato upon a dry, limey, table-land farm with such success as to consider them perfectly guaranteed against the rot, I had a quantity of them sent here by railroad in June, which sold at the highest market price and gave entire satisfaction. But, upon the same farm, last Summer for the first time, the Peach Blows rotted badly; and a letter on my table says those left are of "good size to

shoot humming birds with." This failure was attributed, perhaps incorrectly, in part or entirely, to the wet Summer; but it indicates, I think, that the best varieties, even in the best localities, will sometimes or finally rot; and growers may, therefore, be thankful to you for calling their attention to new varieties—some of which, in some soils and during some seasons, will doubtless prove superior to those which have, in most parts of the country so generally failed during the year 1857. The expense of procuring seed sufficient for experiment cannot be very great; and in our present imperfect knowledge of the cause or causes of "rot," this plan of having "several strings to the bow" seems to be the safest for any enterprising and prudent farmer or gardener.

In this vicinity the White Pinkeyes, Carters or Moshanocks, and Western Reds have been the favorites; but the rot has been so general that every one almost is ready to try all kinds that are anywhere successful; and, unless this Potato Plague stops in its ravages, those varieties of this vegetable or those soils that are *rot-proof* will soon be well advertised, and the discoverers thereof will be private as well as public benefactors.

W. W. N.

BUFFALO, March 8, 1858.



Long White French Turnip.

A VALUABLE VARIETY NOT GENERALLY KNOWN.

During the past Winter, we received from Joseph E. Macomber, of Portsmouth, R. I., a description of a turnip which he stated had been cultivated for "a long time" in that "Eden of Rhode Island." From the general understanding that the seed had originally come from France, and from its color and shape, it has been called the "Long White French Turnip." We requested Mr. M. to forward us a barrel for trial. These came about the first of February, and we have cooked them from time to time with an increasing conviction of their very superior excellence.

Though a little shriveled from standing in a barrel in a warm cellar opening into the basement kitchen, they still retain their good flavor. They are white, solid, cook moderately dry, and are sweet and free from all rank taste. There is none of that hard, woody texture common to most turnips kept until this season. In short, we like them better than any other turnip we have ever cooked. If they grow as well elsewhere as in

Portsmouth—and we do not see why they should not—we incline to the opinion that they will take the place of the rutabagas and most other varieties. We learn that this is already the case in the vicinity where they have been longest grown, though no particular effort has been made to introduce them. Those we received had been trimmed closely, but we have made a sketch of one which is a fair average of those in our barrel, though the best specimens had been previously selected for cooking. In the largest part, it measures 18 inches in circumference, and this is about the medium size. In answer to a letter of inquiry, Mr. Macomber states that:

"It is much used as a table turnip, retaining its flavor and good qualities until the sixth month (June) if kept from the air. It is raised not only for the table, but for fattening beef and feeding sheep. It has almost entirely superseded the rutabaga here. We cultivate in all respects like the rutabaga. We plant in drills two feet apart, on well manured land, after early peas or potatoes, sowing for a large crop, 25th of 6th month (June); but for Winter table, 15th of 7th month to 1st of 8th month (July 15th to August 1st)."

We hope to obtain a plentiful supply of seed for our next Annual Seed Distribution. We are also trying to get enough this year to offer some as an extra premium (No. 4) this year. If successful before this number goes to press, it will be announced on one of the closing pages.

### Ice.

Contrary to the thousand and one fears expressed "by almost everybody who bestowed any thought upon the subject, (the ice-dealers in particular, up to the early days of February, who thought "the Winter was like to rot in the sky,") this has been one of the best ice seasons we ever knew—better even than many of our longest, severest Winters. There are two good reasons for this; the first is that the water through the months of December and January was kept at such a low temperature that the first severely frosty weather froze it at once, and deeply, forming a pure compact ice; and the second is that it had no thaws or rains upon it melting the surface into "slush" to spoil its beautiful hardness, and open the surface pores to let the air either out or in, and destroy its consistency. In consequence, our ice-houses all over the country are filled with the nicest body of good solid ice that ever was got together. Thirty or forty years ago the use of ice in Summer was little known, and then only as a rare luxury, either in this, or any other country. It is now an indispensable necessity in our large cities and towns, and the country family should have it in the absence of a spring-house, or a well of the coldest water.

We can scarcely enumerate the varied uses to which it is made subservient in domestic affairs, and to which it is of great value in an economical way. Nor will we condemn it because it also ministers to the appetites, and depraved tastes of those who indulge in mint-julips, brandy-smashes, jeremy-diddlers, tips-and-tye's, lemon-punches, and a score or more of other "drinks" so universally swallowed during all seasons, by the free-and-easy moralists of the day, "who drink temperately." For these abuses of an absolute blessing, neither ice, nor ice preservers are responsible. We presume the grog-drinkers would suck their decoctions down as freely as ever, without the ice, as they have ever done.

To the dairymen of our country ice is to come into almost universal use—particularly with the butter-makers, through the aid of preservatories,



and such-like inventions, which, we are happy to say, are fast coming into use. And to town's people so cheaply is the article now afforded, and brought to their own doors by the ice companies, that no house-keeper can afford to be without it.

### The Weather.

(This article, written by an associate editor residing in Western New-York, say 100 miles north of this city, is nearly applicable hereabouts, though we had a shorter "cold term" in the latter part of February, than the one described by our associate.)

This is an old topic to put in print, but the past Winter, and present Spring, thus far, have been so remarkable for mildness, beauty, and salubrity, that they are well worthy to be upon record. An Autumn of uncommon rain, wind, and discomfort, both for man and beast, terminated late in November by one of the most remarkable snow-storms, and sharp frosts succeeding, within our recollection. After a fortnight of this premature Winter, the weather gradually softened, the snow all disappeared, and a mild December—half of it Indian Summer—succeeded. January came in with a delightful haze, the ground was still open for plowing, the air very dry and genial. February opened in the same delicious tone for the first few days, but after a week, gentle snows fell over the unfrozen ground, making fine sleighing, and a month of the best "getting about" for farmers within our recollection. It was perfect. The ponds and streams closed thoroughly up. The ice-crop—now a staple of absolute necessity of commerce with our Northern States, as well as of family consumption with most housekeepers—became secure. The woods were perfectly accessible by the ice bridges over sloughs, streams, and swamps, and every applicable thing and beast which could aid in man's labor, was employed to the best possible account. So lasted a month into early March. Then it gradually thawed, the snow melting gently away without severe freshets, or damage, and the mild Spring sun shone down upon us as lavishly as the smile of a mother on a recovering child.

In our Central States, by the middle of the month the plows were merrily turning up the earth for the early seeds, and by the first of April, even as far North as Montreal, the roads were dry, and the ground settled. Two degrees to the North of this, young cattle were turned out of their stables with well filled mangers before them, on the thirtieth day of March, and refused to come back, preferring to forage on the long withered grass with which the previously growing season had clothed the pastures in unwonted abundance. The weather has been, for most of the time, genial and balmy—wonderfully free from its boisterous, fitful habits in March, and early in April. On the average, our Spring crops go into the grounds this year a month earlier than last, and in much better condition. Then the land was clammy and wet; now, warm and dry. The farm stock throughout the country has wintered full fifty per cent better than last year, and on much less fodder. The forage of 1856 was light, the succeeding Winter and Spring remarkably severe and protracted, exhausting all the forage, which got up to famine prices, and every straw of it was consumed. Last year forage crops were abundant, and the past Winter so favorable, that, in the aggregate, millions of tons of hay and other forage, lie unexpended in the barns and stacks of our farmers.

We knew a farmer in Western New-York who had to buy several tons of hay a year ago at twenty-five or thirty dollars a ton, to eke out the season for his large stock of cattle and sheep,

and now after maturing in fine condition a larger stock than then, he has over a hundred tons of good fodder in his barn, cut from the same land that his lessened stock of the previous year nearly starved on. And so it is, more or less, all over the country. Truly may our husbandmen rejoice in the fullness of their mows, their bins and their cribs, as well as feel a pride in the thrift of their herds and flocks now teeming with their annual increase, and the charming prospects for another season of bounty, and, we trust, of healthfulness.

"But," says the discontented man, "prices are low." No matter; it is time they were low; yet not so low as we have seen them within ten years past, when our farmers were happy, contented, and thriving. High prices have ruled for a few years past, we know—and they have been too high for the healthy action of our people. Our farmers have gone into mad speculations, bought too much land, built too many fine houses, got too many carriages, and their families have followed suit, each in their own individual line, and things have gone wrong generally. Now they can quit traveling on the railroads, stay at home, go to work and get steady again. No danger, either, that prices will not be good, and paying prices before the year is out. We have had a grand financial spree, and are now getting sober. No wonder a headache or two has followed.

But we are getting into the economics. We began about the weather, and, as very natural, have wandered into something else. We close by congratulating our farmers on the abundant promise of the coming season, and expect them to employ it to the best advantage.

### Statistics of American Agriculture.

The importance of collecting early and complete official returns of the crops, stock, &c., of American Agriculture, is beginning to be felt. In Great Britain, the wheat crop, for example, is scarcely harvested, before official returns of the entire yield are gathered and spread before the country. This saves much uncertainty as to probable prices and is undoubtedly of inestimable value to producers, however it may effect the interests of dealers who speculate mainly upon the doubt and uncertainty as to the actual yield in any year. Something equivalent to the system of annual statistic tables recently put in operation in Great Britain, will, we hope, be soon introduced here. At present we have only imperfect tables gathered once in ten years, and published in the decennial census reports. But even these are still imperfect, and we are happy to second any effort to render them more valuable. The "American Geographical and Statistical Society" of this city is agitating the question, as will be seen by the following proceedings at a recent meeting for organizing an "AGRICULTURAL SECTION."

JOHN JAY, Esq., was chosen chairman of this section, and read the opening paper, taking for his subject: "The Pre-eminence of Agriculture as the leading National interest of the United States, and the increased importance it is to derive from the growing demand for bread for Western Europe." We can give but an outline of the remarks.\* Various facts were quoted to indicate a future increase of that demand, not only in England, but in France, Belgium, Holland, and the German States. The food question is evidently recognized by the European Governments as the great economic and commercial question of the age, and as one that is invested in times of scar-

\* Since writing the above, we learn that this address, with some additional matter, is to be published by A. O. Moore: in a hand-book of some 150 pages. 25 cents in paper, or 50 cents bound.

city, with marked political significance. The capacity of the United States to become the grain producers of the world, is apparent from the breadth of her arable land, the small density of her population, the intelligence of her farmers, the expanding influences of her institutions, and her commanding central position.

Agriculture is destined not simply to furnish the bulk of our exports, but to exert an all important influence upon our national strength in developing the industrial and moral qualities of our people, and its future statistics may develop laws that will assist us to solve moral and economic questions, that have puzzled the statesmen and philanthropists of both hemispheres.

The returns of the census for 1840 and 1850, disclose with tolerable accuracy the leading features of our agriculture, the amount of land occupied, improved and unimproved, the breadth of land devoted to the several crops, the annual value of each crop, the average of crops to the acre, the number of farms, their average size, the average value of land in each State, &c. They show INDIAN CORN, our native grain, to be by far our largest staple, exceeding in value wheat, cotton and hay combined. This crop (corn) has doubled since 1840, and yielded the last year more than eight-hundred millions of bushels, worth Four hundred Millions of Dollars. Wheat comes next and constitutes of breadstuffs our largest export.

The apparent deterioration of the soil as shown by the decreasing average of crops to the acre, the average of wheat in New-York, Ohio and Indiana being 12 bushels, while in England it is 21, and in Scotland 30; the average duration of life in towns and in the rural districts with a reference to the fact that in Surrey, England, it is 45 years, and in Manchester and Liverpool only 25, and the increasing proportion of our population who are relinquishing agricultural pursuits for trade were referred to as interesting topics which might be so elaborated and verified by the next Census, that its returns should teach us not only lessons of political economy but of daily duty. The subject was one that concerned the whole country and suggestions for the improvement of the agricultural schedules would doubtless be cordially welcomed at Washington.

On the conclusion of the paper, Hon. Geo. Folsom, made some remarks concluding with the following resolutions which were supported by Mr. Pierrepont and Dr. Adamson, and adopted:

"Resolved that in the opinion of this Society the increasing magnitude of the Agricultural interest in the United States renders it a matter of National importance that the Agricultural Schedules, for the census of 1860, should be made as complete as possible, with the view of marking accurately its progress, its capabilities and the profits of Agricultural labor; and with the further view of discovering where, and to what extent, the arable soil of the country is deteriorating in fertility, under existing modes of cultivation.

Resolved, that the agricultural section of this body be instructed to invite suggestions from gentlemen throughout the Union, in regard to the topics that should be embraced in the New Schedules.

On motion of Mr. Barney, it was further

Resolved, that the Governors of the several States be advised by the Chairman of the Agricultural Section of the foregoing resolutions, and be respectfully requested to present to the Society, for preservation in their library, a copy of the last State census and any other official documents bearing upon its Agricultural Statistics."

After some further conversation in which Mr. Folsom and Mr. Dinsmore took part, and a vote of thanks to Mr. Jay, for his address, notice was given that a meeting of the Agricultural Section would presently be called, for "working purposes," and that gentlemen wishing to join would please send their names to the Chairman.



## Farm Buildings...III.

We have now arrived to the period when the farm requires a first-class dwelling to complete its range of appointments; and the farmer and his family, by their perseverance and well directed industry, are entitled to and can appreciate the value of a convenient and commodious house. Before proceeding to a description of the design now presented to our readers, we offer a few general remarks.

Simplicity in all things should mark the life and surroundings of the farmer. Not that he is not just as well entitled to surround himself with objects of taste and art, and luxury, if he can afford them, as the richest parvenu who lives amidst the dense population or in the environs of the great city—but his estate, his occupation, his enjoyments are in the country. He is apart from the throng of society, the whirl of excitement and the vortex of fashionable life. His employments are grave, his habits are domestic, his leisure serene, quiet, and cheerful. So with his family. Estranged from crowds, and away from the towns, he should be as independent of their immediate assistance to his wants as possible; and all about him, in the way of buildings and appurtenances which are to be furnished and supplied by mechanics and others not within the sound of his own dinner horn, should be of a character to require little of them beyond the contingent labors to which they are of necessity liable. In this we mean to say that, surrounding himself with everything in the way of building which his occupation, convenience and necessity requires, and which the means at his command will allow, all his structures should be permanently, thoroughly and tastefully constructed—not in a way to need perpetual alteration, tinkering and repairs to which the ephemeral things, called dwellings, in and about our cities and villages, are frequently subject. The farmer who, intending to build, throws himself into the hands of the nearest professed architect, whose practice has only been among town or village houses, will groan over his mistake when his money is squandered, and by sad experience he has found out his folly in erecting the unsuitable tenement and surroundings which he fancied might answer his purpose. He must first, of himself, know what he wants. Then, if he have not the requisite taste or ingenuity to plan them himself, he should go to a reliable friend who has the taste and judgment to properly advise him, and sufficient interest in his welfare to see that he is not cheated, nor coaxed into plans unsuitable to his objects. Herein we do not charge the professed architects with dishonesty, but we know that, in designing farm buildings, so predominating is their disposition to finery, and display, that they unwittingly sacrifice a deal of economy, convenience and comfort to tawdriness and show—"style," "effect," or "good-keeping," as they may choose to call it. And out of this grows the thousand and one gimeracks, with grotesque shapes, stilted roofs, flagree trimmings and tinsel appendages of every sort hitched on to them, which tend only, as situated, to make them ridiculous. We can point to any number of such, all over our thirty farming districts. Within a year after completion the aid of a mechanic of some sort, and more often several sorts are called in, and a perpetual run into town after trifling articles is needed, and scores of mechanics' bills are to be paid in rectifying defects which never need have existed, and which a sensible plan and style of building, at first, would have obviated. Thus, then, our farmer has entailed upon him

an endless succession of discomforts, vexations and expenses as a penalty for his own folly by entrusting his designs to incompetent hands.

This may be severe talk, we admit, but we speak from stern experience and full observation in the premises, and well knowing the truth in the matter. We may be met by the remark that "there must be an observance of architectural rule, and form, as laid down in the different orders of architecture by the great masters, and they must be adhered to, or the whole thing is a failure!"—to which we reply, that it is utter nonsense. Such remark may apply to many public buildings, erected for certain purposes; but we have never yet seen a country dwelling, either designed in the books or actually built in the pretended style or order of a particular architecture but what has been violated a score of times in the monstrosities or absurdities hitched on to it by the conceits of a quack; and let the design be Grecian, Gothic, Norman, Tudor, Italian, Moorish, English Cottage, or whatever else it may be called, ten to one more or less of each are mixed up and huddled together in a single structure, when applied to a first-class country dwelling, and which the unfortunate owner fancies is a "pure model" of its illustrious original prototype!

We simply say that a country dwelling cannot be built purely in either of these given styles, consistently with the demands of our American climate, and the due economy and convenience of an American farmer. The Italian, taken altogether, we consider the best adapted to American use, as being comparatively cheap and permitting additions at a future day, if required, without violence to the general effect of the original structure; but the Italian roof is nearly flat, or of such moderate elevation as to be a serious hindrance in passing off our heavy rains and snows, and protecting us from the effects of the severe and extreme frosts to which we are subject. Therefore, we must adopt the steep roof, and Americanize the style, and thus modify it, as we must all these foreign modes of architecture, to meet the wants and demands of American climate and American life.

After such remarks, we need only say that in the design we now offer to illustrate our ideas of what appertains to a first-class American farmhouse, we have studied the fitness of things to their proper use; that economy in structure, convenience in use, and due comfort to the occupants are the chief requirements consulted. General plainness, with a due regard to ornament, and thorough substance throughout, are the prominent features of our plans; in short, an adaptation of building to our circumstances. As such, we introduce on the next page a perspective view of our first-class farm dwelling-house and its immediate appendages.

This is a full two-story house, with walls of twenty or twenty-two feet high above the lower floor, forty-four feet long, and thirty-eight feet wide, with a rear wing one and a half stories or sixteen feet high, and thirty feet long by eighteen or twenty feet wide, according to the material of which it is built. The house may be built of wood, brick or stone, as convenience, or the means of the owner may permit. We, other things equal, would build a farm house of stone. The roof, as in the elevation, is a third, or twelve feet pitch, or may be reduced to a quarter pitch, is broadly and liberally thrown over the walls, projecting full three feet beyond, on the main building, and two and a half feet over the kitchen-wing, and two feet over the out-buildings. Indeed, the roof should be a prominent feature of

the farm house, and its appendages, as it is of these, with no more breaks in it than what are absolutely necessary to give it an agreeable effect—as in the gable-roof before us, over the balcony, or the front verandah—to obviate the otherwise monotonous line of the eaves. For, wherever a break is made in the roof, tin, zinc, lead or copper gutters are requisite to take off the water running down the shingles, and prevent leakages; and these are expensive, and unless thoroughly laid, and well soldered, liable to frequent openings needing repairs. The upper part of the rear-wing-roof runs into the rear roof of the main dwelling, in the same way as the front gable. The chimneys should be within the body of the house, to give out to the adjoining rooms all the heat they absorb, and break out of the building at the peak of the roofs, as in this, thereby allowing the least possible chance of leakage, which is difficult to guard against where they come out in the declining line of the roof, or midway of its slope. Such arrangement of roof, and chimney, we conceive to be altogether the best, and sanctioned by long experience in the occupancy of dwellings so constructed. The front verandah is eight feet wide, and of such length that the projecting eaves shall reach to near, or quite the ends of the building. The end windows, where not immediately protected by the roof, are hooded. The rear or kitchen verandah is six feet wide, running the whole length of the wing, and adjoining the woodhouse in rear.

## ACCOMMODATIONS ON FIRST FLOOR.

The interior accommodation does not require extended remark. Entering the front door into a hall 8 feet wide, the right leads into a parlor, or library, as may be most desirable, 16 feet square with a small closet attached, accommodation for a stove, a fire place at the chimney, and lighted on two sides by a window in each. On the left is a sitting room, 18x16 feet, lighted, and warmed like the opposite room, with a door leading into the family kitchen. The ceiling of these rooms, as well as those in rear, in the main body of the house is 10 feet high. A flight of chamber stairs leads from the main hall into the chamber hall above, and at its end a door goes into the main kitchen. On one side of the kitchen is a family bed-room or nursery, 16x13 feet, with a closet, and fire accommodation either by fire-place or stove, at choice. The kitchen, or chief family room, is the grand economical feature, however, of the interior, as it should be of every farmer's dwelling; and we shall be excused, if in describing it, we go somewhat into detail. It is literally the farm-house "Exchange." It is occupied first in the morning, and last at night. Here is done the chief cooking and getting up of the family requirements for the table, the house-work, and the gathering at meal-time. It should be spacious in room, accessible to the other usually occupied apartments, light, warm, and comfortable. It should have a liberal, open fire-place, an oven, and a cooking stove, with ample room, light, and convenience for the use of all—in short, every good farmer, and housewife know the solid satisfaction and comfort of a well situated, spacious, and convenient kitchen for every day use. It is, indeed, the farmer's living-room—indispensable: and without it, indoor work never goes right.

Our kitchen, therefore, is 27 feet long, and 16 feet wide. It has two windows at one end, and one at the other, causing us to place the rear-wing a little more on one side than we otherwise would have done, to gain this end window. It has an open fire-place, and oven adjoining, and a separate flue with a thimble above, to let in the pipe of the cooking stove, which may be in the back part



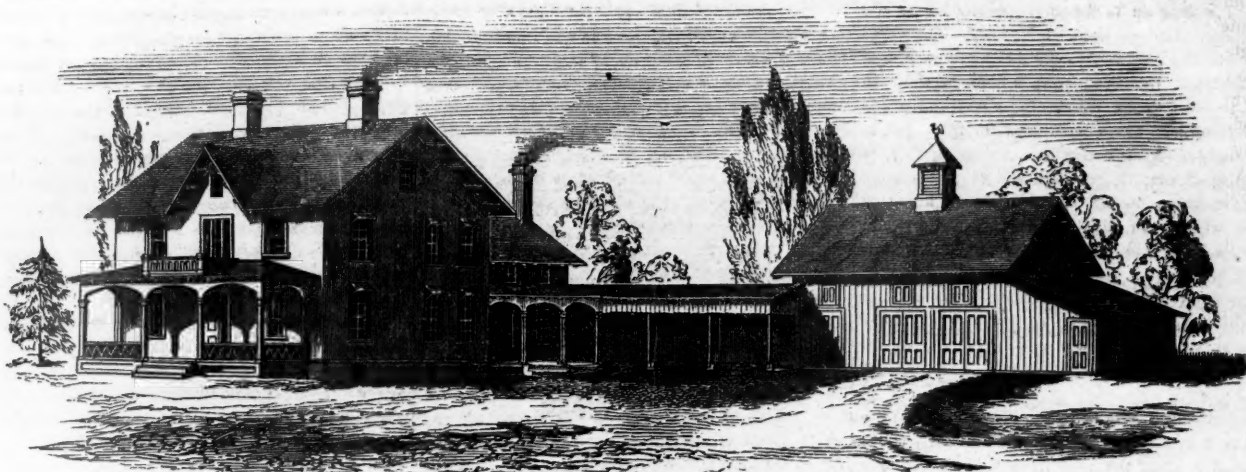


Fig. 7—A FIRST CLASS FARM DWELLING AND ITS IMMEDIATE APPENDAGES.

of the room between the rear window, and large closet door, thus giving, in Winter, additional warmth to the apartment. In the partition next the front stairs is a door leading down under them to the cellar; another door in the rear, leading into a large dish and provision closet, 10x5 feet, and through that, into a buttry of the same size; or these, without the partition, may be in one commodious room. Another door leads into a rear

gathered at all seasons, as they may chose, for domestic enjoyment. It may be well to remark that the kitchen chimney, giving so large accommodation as it does to the fire-place and oven, should be spacious in its foundation, and carried up broadly through the lower story and contracted above only to the necessary space for the flues to carry off their smoke effectually. The opposite chimney should also, at its outlet in the roof, be

with, at pleasure. A chamber door leads, on either side of the hall, into a spacious sleeping room, with closets. A door in rear of the hall, from the head of the stairs, leads into a rear hall with a large bed clothes closet, 8x5 feet, and another sleeping room, 16x13 feet, and round to another sleeping room, of 12x16 feet, into the rear passage over the lower room of the rear wing. In this rear hall of the main building is a flight of garret stairs, leading from its rear part, up into the center of the loft overhead, where all sorts of garret storage will find accommodations, or further sleeping rooms, even, can be made. A house of this size, however, will hardly require them.

Leading back, down three steps, this rear passage leads into a narrow hall, 4 feet wide, round to the head of the wing flight of stairs, and into a lodging room, 12x10 feet, and into another, 16x18 feet, for the use of the laborers who board and lodge in the house, if any; or for such other use as may be necessary. Thus, either flight of stairs leads all over the chamber rooms, at will, or, by locking one of the passage

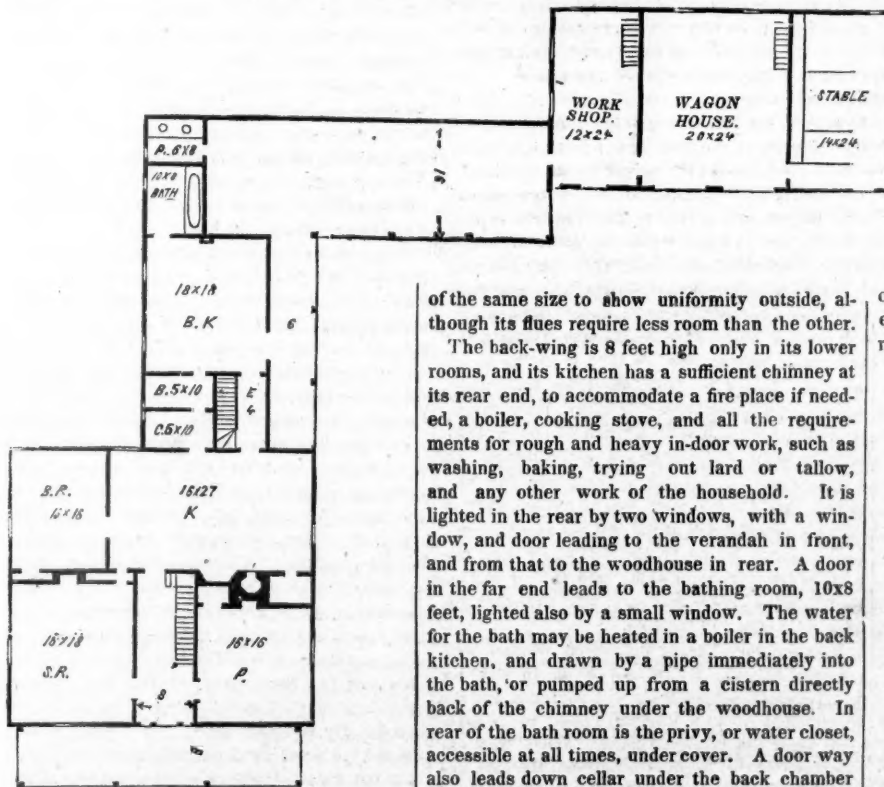


Fig. 8—PLAN OF FIRST STORY.

ha, 4 feet wide, and 10 feet long, running into the wash room, or back kitchen; this hall also communicating by a door with the wing verandah. From this rear hall, a door next the inner kitchen door, or leading immediately out of the inner kitchen, if preferred, leads up a flight of back stairs into the wing, thus relieving the front stairs from common use. Thus, then, our family kitchen, by the aid of the back-kitchen, or wash-room, marked B. K., 18x18 feet, is relieved from the rough work of the house, leaving it always capable of use, as a neat, tidy affair, where the meals are eaten, the lighter labor done, and the family

of the same size to show uniformity outside, although its flues require less room than the other.

The back-wing is 8 feet high only in its lower rooms, and its kitchen has a sufficient chimney at its rear end, to accommodate a fire place if needed, a boiler, cooking stove, and all the requirements for rough and heavy in-door work, such as washing, baking, trying out lard or tallow, and any other work of the household. It is lighted in the rear by two windows, with a window, and door leading to the verandah in front, and from that to the woodhouse in rear. A door in the far end leads to the bathing room, 10x8 feet, lighted also by a small window. The water for the bath may be heated in a boiler in the back kitchen, and drawn by a pipe immediately into the bath, or pumped up from a cistern directly back of the chimney under the woodhouse. In rear of the bath room is the privy, or water closet, accessible at all times, under cover. A door way also leads down cellar under the back chamber stairway, if necessary.

## CHAMBER ACCOMMODATION.

This needs little remark. A turn of two feet in the upper story lands on a floor three feet wide, leading to the front hall, 8 feet wide, and by a door-window, on to the balcony over the verandah, protected by a railing. The floor of this balcony should be slightly inclined outward, and floored tightly over with lead, tin or zinc, and painted, or if not needed the balcony may be left off altogether, and the verandah show only a plain roof throughout. It is a thing of luxury only, although, we think, adding to the architectural variety of the building, and may be retained or dispensed

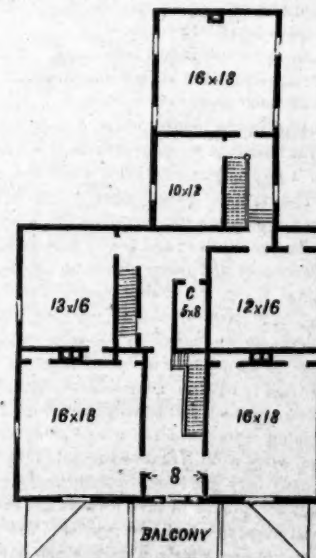


Fig. 9—CHAMBER PLAN.

doors, egress may be confined to either part of the chamber at pleasure.

The wood-house is 16 feet wide, and may be extended to any length required. It is a cheap building, any way, and we would have it ample in size, and accommodation. Its height is such as to admit the wing porch, or verandah, to run into its roof on a level. It has a double or ridge roof, and

runs adjoining on to the building containing the work-shop, carriage-house, and stable. The work-shop is 12x24 feet, with a flight of stairs in it, and a lumber-loft overhead with a door window in front to receive and discharge its material. The work-room also has a large door in front, and is well lighted with windows. Adjoining this, is a carriage-room, 10 feet high and 24 feet square, with two large double doors in front, and two small windows to light it in rear. A flight of steps leads into the hay-loft above, and a harness-room, and granary may be partitioned off below, if necessary. From the carriage-rooms a door leads through a passage, 4 feet wide, into the horse stable, with a single and two double stalls, and one window in the further end, and another in the side.

The stable, it will be seen, is a lean-to with a shed roof of a quarter pitch, or whatever pitch is required to bring the roof from the plate of the carriage-house to that of the stable, which is 8 feet high. The roof of the stable should also project in front as far as that of the main building, to give the outside wall shelter, and show a full finish. We have made the stable a lean-to, because, being more or less damp from the stable, and droppings of the horses, the floor timbers and sills are subject to decay, and they can better be repaired without disturbing the other parts, than they would if in the main building. We think, besides, the lean-to form of the stable gives the whole building a more comfortable, homelike, and sheltered look. We have one on this model which we have long used, and have found no individual feature of it which we would alter, so convenient has it proved. If our readers are dissatisfied that this work-shop, carriage house, and stable design is just like another which we have adopted as an independent building in our series of farm structures, our simple answer is, that we can invent none better, cheaper, or more convenient, or in better style of architecture; and having found a thing as perfect in its kind as we can contrive, we think it hardly worth while to design an inconvenient and pointless thing for the mere object of showing a variety. Our designs are intended, of course, to be merely suggestive,—not models to be strictly imitated.

Thus much for our model farm-house. Our incidental remarks, made as we have proceeded in the description, show our views of all that the farmer needs in the indulgence of a taste for display in his buildings consistent with the requirements of a well regulated, thrifty rural establishment. That this design will equally well answer the purposes of some country dwellers who are not farmers, we believe; and that it may be adapted with economy and convenience to all their family wants. We might have varied it in outer appearance, and given it a different architectural style; but such, we consider, is scarcely worth while, nor do we believe we could better it. As it is, we trust it will be acceptable. It may be said there is nothing particularly new about it, and that the main features of the whole affair are old fashioned. Very well; if that be so, there have been a good many very good houses built, and lived in with great acceptance to their owners and occupiers in past days, at which we rejoice. The hills, valleys, mountains, woods, waters, grass, cultivated fields, and a thousand other objects of love and life-long familiarity are not new, yet none the less admired that they have ever greeted our sight. That they be sufficient and needful for our wants, and agreeable to our tastes, is sufficient to satisfy any reasonable mind; and they who want to go into absurdities from the mere love of variety, or the gratification of a vagrant fancy, can do so without our assistance, however.

#### COST OF THIS ESTABLISHMENT.

That may vary from three to five thousand dollars, according to the price of material and labor, and the extent of finish. The first sum will erect and finish the whole in a plain way; and the latter will do it in the completest manner, while it may vary, more or less, at any sum between. We cannot well, and we certainly need not go into the details of finish, as in the erection of the building. A competent builder and mechanic should take charge of the work, draw out the plans, and give the items of expense in each one, by itself.

We have submitted the elevation and plans, sufficient for general use, as intended, and trust they will prove satisfactory.

#### To get rid of Ants.

It may seem an easy matter, to the uninitiated, to get rid of ants. So thought we, years ago, but we think otherwise now. Our front-yard, when we first came into possession of it, abounded in ant-hills, and to get rid of them, we followed the advice of a neighbor, viz: to cut off the tops of the hills with a shovel, and then throw on a shovel-full of fresh ashes or lime, carting off the hillocks into the street. This process evidently weakened their forces for a while, but did not utterly rout them, for in a few weeks new hills were peeping up around the old ones on every side.

At another time, we discovered a large ant-hill around the roots of a favorite pear-tree. A friend suggested a dressing of salt, though in small quantities, lest the tree itself should be injured. The ants liked salt: at least, they "stood it." Not to be beaten, we increased the dose, and succeeded, in salting down the ants and the tree likewise. Rather, we simply drove away the ants and killed the tree. The ants did not travel far from the salt-pit; they merely moved to the pear tree next in the row, and in a few weeks commenced house-keeping in their usual style. "Why don't you scald 'em out," said a neighbor, looking over the fence and seeing our perplexities; and if that don't do, then pound 'em, take a mallet, unroof their house and pound 'em as fast as they come up to see what the matter is. Well, we tried both plans, and with partial success. Plainly, their household affairs were disturbed, when we poured down scalding water through garret and chamber and kitchen; but this did not exterminate the varmints. And the pounding was an extinguisher, as far as it reached, but it did not put an entire end to the race. Moreover, the hot water hurt the roots of the tree, somewhat; and in our zealous pounding, we broke off several fine branches and barked the trunk of the tree.

Last Summer, having suspended warfare with the ants, because it did not seem to pay, we watered our besieged trees with soapsuds, and the refuse slops from the kitchen, hoping to promote their vigor and productiveness. What was our surprise to find that, before Autumn, the ants had struck their tents and gone to parts unknown! They could stand salt and lime, and hot-water and earthquakes, but when bilge-water came streaming down into their private apartments, they gave it up!

But our troubles were not to end so easily. As if to wreak vengeance upon us for our attacks on their homes out of doors, the ants, like the frogs of Egypt, came up into our very dwelling, infesting kitchen and pantry, running into sugar bowls, dishes of preserves, molasses jugs and all our wife's dainties. A few years ago, we built an arbor\* around the trunk of a fine old elm in our

\*In the previous volume (16) page 229, we gave an engraved sketch of this arbor.

grounds, where we might enjoy a siesta, of a Summer's noon, or sit and gaze on the beautiful prospect spread out before us. For the first season, it answered our expectations and yielded us a great deal of enjoyment. But, last Summer, soon after the ants capitulated at the battle of the pear-trees, some of them took a fancy to our arbor. And while we were daily endeavoring to enjoy our favorite seat, we found the ant's running up and down the tree, over the arbor, and over our clothes, and under our clothes, and all to our exceeding consternation and annoyance. The kitchen slops, which were so efficacious at the root of the pear-trees, would not answer in the pantry or the arbor, so we are driven to the use of some other weapons. We have lately devised some new apparatus for assaulting our enemy the present Summer. How successful the campaign shall prove, remains to be seen. How to get thoroughly rid of ants, we consider an open question.

#### My Neighbor's Barn Cats.

To the Editor of the American Agriculturist:

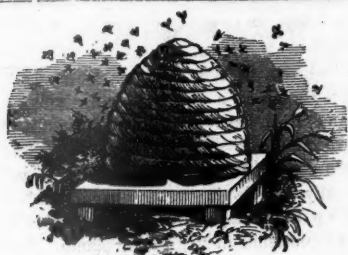
Notwithstanding the "public" consider cats as the fireside divinities of the unappreciated "belles" of former generations, and as being specially invented to be tormented by boys and dogs, farmers who raise large quantities of grain acknowledge their usefulness, and if fortunate in their management, think one good cat is worth all the terriers in the world, this opinion can hardly be doubted. Drop in upon your city neighbors, the flour and grain dealers, and ask to see their rat catchers. Every one will show you a CAT. Your article on page 71, March No., leads me to say a word of the cats of my friend, farmer D. He Winters some thirty head of cattle and raises choice swine, and feeds them high—buying shorts or other ground feed by the ton, and keeping it in a bin in his barn. The pigs are kept in separate pens in a part of the barn cellar and well supplied with clean straw. Their mixing trough stands under the bin and is supplied from it through a spout, and the aqueduct log is at one end of the trough. Is not every arrangement made for the convenience of rats and mice as well as himself? Yet he told me that he would give \$100 for every rat or mouse that could be caught upon his premises. His barn and dwelling join. He keeps six cats—five of the feminine gender and the other he calls his "wether" cat. The "wether" cat is not supposed to be a mouser, but drives off the "Thomas" cats, so that kittens are nearly as scarce as rats. His hens have their quarters in the corner of the house-cellar nearest to the barn and although grain is always upon the floor no rats are seen. The cats are fed on milk—only once in a great while do they get anything else—and they are never allowed to be in the house. He says cats have "fits" because they are fed too much meat and are permitted to sleep near the fire. . . . One of his cats has an extraordinary fondness for cows; I saw her walk along in front of them and purr as each cow licked her with the tongue.

M. B. I.  
Massachusetts.

THE MAPLE SUGAR CROP FOR 1853, will probably be a very light one. The first of the sugar season was unexpectedly early and sugar-makers were not prepared to improve it, while the early opening of Spring, stopped the flow of sap much sooner than usual.

He who can take advice is sometimes superior to him who can give it.





## Wonders of the Bee Hive...XI.

Fire is said to be a good servant but a bad master; and with a similar contrast we may speak of the honey-bee as an excellent servant, but a terrible foe. Small as it is, it is capable both of contributing greatly to our enjoyment, and of inflicting injuries which few would care to receive.

"They compassed me about, they compassed me about like bees," was the vivid description given of old by one who had been beset by foes; but blows, and wounds from stones and clubs and arrows and javelins, are hardly to be compared with the innumerable stings which may be inflicted by these tiny insects, searching out in their anger, every part of the body, and leaving abundant room for hundreds more to participate in the attack.

The sting of the bee is a formidable weapon, the fear of which gives the hive protection from the attacks of men and of animals. Yet it seldom has occasion for the use of this dreaded implement. It does not go about the meadows seeking for opportunities to worry horses and cattle, and distress the poor innocent sheep, or persecute the cats or the poultry. No creature more faithfully minds its own business, and lets every body else alone, than "the little busy bee." And of the thousands of bees in a hive, all armed with the same weapon, and equally capable of employing it with effect, very few ever find occasion to use it. And in swarming time, when more than at any other season, some care must be shown the bees by those who wish to enjoy the fruits of their labors, it is exceedingly rare for them to be provoked to anger.

The weapon itself, however, would occasion us very little inconvenience, were it not for the poison which flows through it. The pain produced by a very fine needle penetrating the skin for one-twelfth of an inch, could be easily borne, but if the needle were a hollow tube, through which a concentrated poison was forcibly thrown into the pores of the skin, and thence rapidly diffused through all the surrounding parts, it would be quite a different matter. And, after all, it is the venom, rather than the sting itself, that makes it desirable for us to keep the bees good-natured.

We have an engraving of the sting and its appendages, (fig. 17) that may interest some of our readers. We will refer them first, however, to fig. 3, page 9, Jan. No., where similar parts of the insect are introduced. There, *A* represents the poison bag, which is supplied from the tube below it, of which, indeed, it is an enlargement. *C* indicates the muscles that move the sting whose barbed point is seen projecting below.

In fig. 17, *A* is seen in a different position, and the tube descending from it can be traced to the very extremity of the figure. When we look at a bee's sting with the unaided eye, the closest examination does not detect any roughness or unevenness in its polished point, but the microscope shows that it is furnished with barbs like a fish-hook, so that when once it has pierced the skin it is not easily withdrawn. These barbs are attached to two separate shanks which close together, but move independently. A two-fold ap-

pendage is seen above the point, whose use is unknown; and still higher up, on either side are the muscles and cartilages that thrust the barbs upward. Swammerdam, from whom this figure is copied, says, that after dissecting these parts, he has found the poison bag *A* so strong and firm, that by pressing it with his fingers as hard as he could, the poison might be thrown to the distance of two feet from it through the sting. And so, no sooner have the barbs worked their way into the flesh, than the venom is ejected into the wound they are making, and in some mysterious manner is distributed through the surrounding glands, causing oftentimes severe pain and enor-

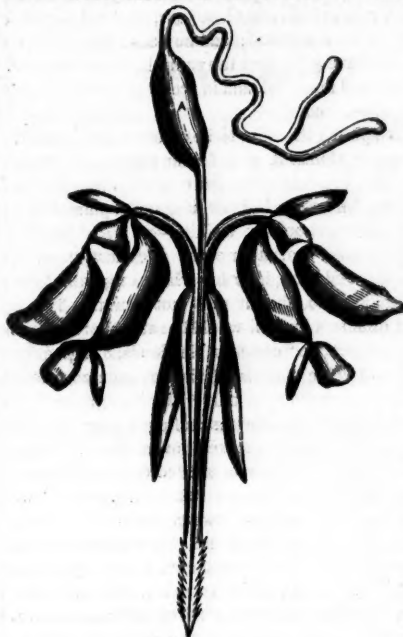


Fig. 17—THE STING AND ITS APPENDAGES.

mous swellings, which may not subside for eight-and-forty hours.

It is frequently the case that the bee, in attempting to withdraw its sting from a wound, leaves it there with its accompanying parts. Of course the insect is disabled, but the muscles of the sting continue to act for a little time, and the longer this is permitted, the greater is the inconvenience resulting. And the author just quoted suggests, that in our attempts to extract a sting thus left, the pressure on the poison-bag, may force out a greater quantity, and thus increase the evil. Sometimes a bee, when provoked, does not know where to make an attack, and a drop of poison may be seen clinging to the extremity of its sting.

The sting is used in self-defence to repel an injury received or feared. The workers sometimes employ it in destroying the drones. The queen uses her's only in an attack upon her rivals. The bees are greatly excited by the odor of their own poison, and are offended also by the human breath, and by disagreeable odors generally. This may account for their antipathy at times to persons after a fit of sickness, that previously had handled them with impunity.

The remedies for one who has been stung are almost as numerous as for a common cold. We have never found anything uniformly successful; and when we have neglected all remedies, we have sometimes suffered no inconvenience at all. Rubbing or sucking the wound, is probably worse than useless. The immediate extraction of the sting and the copious application of cold water, are simple and unobjectionable measures. And for the encouragement of apiarians, we will add that there is some reason to hope that the human sys-

tem after a time may become so fully impregnated with the poison as to suffer no further inconvenience from being stung.

## CURIOUS INSTANCES OF BEES AT WAR AND IN WAR.

The wars of bees with each other are among the strange mysteries of nature. A few years ago, in Conneaut, Ohio, no less than seventy swarms, it is said, engaged in a battle which was continued from three o'clock in the afternoon until six. They were all the property of one man who had them about equally divided on opposite sides of his house. No one could account for this desperate contest, and though the ground was covered with the slain, neither party gained the victory. Two young swarms were entirely destroyed, and others were greatly weakened.

In Carlisle, (England) a swarm of bees flying over a garden in which a new colony had been recently placed, settled upon the hive, and a contest ensued which resulted in the defeat of one party while the victors settled down in the branch of a neighboring tree. In this case the cause of the battle may have been the desire to secure possession of the quarters occupied by the first colony.

The attack of bees upon an army is a matter not provided for in the ordinary books on tactics. But we have recently had in the papers the following account of a regiment put to flight by a swarm of bees.

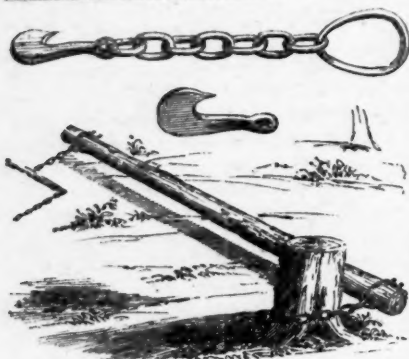
"In India, lately, while the army were returning from Alumbagh to camp, one of the Lancers was tempted to poke his spear into a bee's nest, when the swarm at once turned out and attacked the soldiers with such ferocity, that they all turned tail and fled, both officers and men, abandoning their guns, and they did not stop until they had reached the camp, where they were enabled to partially protect themselves from their active persecutors."

Still more remarkable, however, is the use of bees as a means of defence against an armed force, and we close this number with some curious matters of history drawn from sources not generally accessible to our readers.

"A small privateer with forty or fifty men, having on board some hives of earthenware full of bees, was pursued by a Turkish galley, manned by five hundred seamen soldiers. As soon as the latter came alongside, the crew of the privateer mounted the rigging with their hives and hurled them down on the deck of the galley. The Turks, astonished at this novel mode of warfare, and unable to defend themselves from the stings of the enraged bees, became so terrified that they thought of nothing but to escape their fury; while the crew of the small vessel, defended by masks and gloves, flew upon their enemies, sword in hand, and captured the vessel almost without resistance."

"When Amurath, the Turkish Emperor, during the siege of Alba Græca, had battered down part of the wall and was about to take the town by assault, he found the breach defended by bees, many hives of which the inhabitants had stationed on the ruins. The Janissaries, although the bravest soldiers in the Ottoman empire, durst not encounter this formidable line of defence, and refused to advance." (Jardine.)

Kirby and Spencer quote another incident "During the confusion occasioned by a time of war in 1525, a mob of peasants assembling in Hohnstein, attempted to pillage the house of the minister of Elende, who having in vain employed all his eloquence to dissuade them from their design, ordered his domestics to fetch his bee-hives and throw them into the middle of this furious mob. The effect was what might be expected; they were immediately put to flight, happy to escape being stung."



A Stump Puller.

A correspondent recently sent us the above drawing of his Stump Puller. We handed it to an artist, who returned the engraving, but unfortunately lost the original sketch and accompanying article, descriptive of the implement. This is of little consequence, however, as the whole operation is plainly shown in the cut. The contributor has our thanks, and we request his address, that we may give him due credit in our next Basket budget.

#### Depth for Planting Corn.

If corn is planted three inches deep, it will come up and grow thrifty for a while, until it is three or four inches high; then it will stand still ten days or a fortnight. If now, we examine the roots to ascertain the cause of this check upon the growth of the corn, we shall find that a joint has formed about an inch and a half above the kernel from which new roots have sprouted, and that the roots first formed below the kernel have rotted. While the process of changing roots is going on, the plant ceases to grow perceptibly above ground. The stalk and ears flourish as well after this change, as corn planted shallower, but there is a loss of about a fortnight in the growth and maturity of the plant. The lesson to be derived from this fact is, obviously, that to have *early* corn, it must not be planted more than an inch and a half deep.

It may interest some who are now engaged in planting Indian corn, to read the following record of experiments made by a careful observer:

No. 1.	planted 1 inch deep,	came up in	8½ days.
2.	do 1½	do	9½ do
3.	do 2	do	10 do
4.	do 2½	do	11½ do
5.	do 3	do	12 do
6.	do 3½	do	13 do
7.	do 4	do	13 do
8.	do 5½	do	17½ do

No. 8 came up very weak, and died in a few days.

#### Peabody's Premium Prolific Corn.

A score or more of subscribers inquire about this corn. We know little of it—and expect less—so far as adaptation to Northern cultivation is concerned. When we have fruited and liked Mr. Peabody's Strawberry we may then look after the corn. Our friend Frank G. Ruffin Esq., of Richmond, Va., Editor Southern Planter, has tried it. In his April issue he gives Mr. Peabody's circular, and proceeds to 'remark' upon it as follows:

"Accompanying the circular, from which the above are extracts, came a box to us, containing samples of the ears and stalks of the Peabody corn, and a small bag of the same for ourselves, for which Mr. Peabody will please accept our thanks.

That Mr. Peabody really did make the crop of corn he took the Premium on, we shall not dispute; as little that one or two persons made large profits on the sale of *Morus Multicaulis*; that Mr. Iverson made—was it four tons per acre?—of the Rescue grass, in something less than no time, by his own showing; that the West Indies will be outdone by Connecticut in the Sorgho and Imphee; or that Jack the Giant Killer accomplished wonders by means of a very prolific bean—not the Chinese prolific pea. Nevertheless, we can not advise our readers to purchase the corn for seed unless Mr. Peabody will send persons to grow it for them. We do not speak unguardedly, because we tried a sample sent us last year, and not a sucker did the corn produce; and no better crop than we might have grown on the same land—stiff upland, limed and manured, and in pretty good heart—with our own seed.

Supposing the corn to be quite as good as Mr. Peabody thinks it, no man can afford to purchase it at the price he asks, for it will do him no good for seed if he has to grow it upon a plantation in the neighborhood or vicinity—to wit, "six hundred yards"—of other corn. He must, therefore, obtain seed enough for his whole crop, and for his neighbors too, that it may not "mix." This, at ten dollars a bushel, would be rather hard even for corn which, on "common pine lands, bringing from ten to twelve bushels of the common corn to the acre," manured with only "160 lbs. guano to the acre," should, "notwithstanding a drouth of seven weeks," produce "more (how much more?) than one hundred bushels of shelled corn to the acre." By the way, if that corn had been manured with the CONGLOBATED SUCCEDANEUM, or essence of tumble-bugs, of our friend, FAIR MIXTURE, Esq., which, it may be remembered, when tried at pine thicket, on a roasting-ear patch, "produced seventeen ears on a stalk, each ripening just in time for table use," and which applied in another field—"a handful to the hill,"—"gave twenty-two ears to a stalk, and all hard on the 4th of July, two days after the silk appeared;" if, we say, the CONGLOBATED SUCCEDANEUM had come in contact with Peabody's Prolific, would not the product have jarred the ground, if not frightened it into an earthquake?

We advise our friends to wait awhile. Perhaps the corn may fall. One hundred bushels per acre, at ten dollars per bushel, is one thousand dollars per acre. Twenty-five acres is twenty-five thousand dollars; and that for four years—the Presidential term—will make a man rich enough to authorize his selling afterwards at a living profit. Meanwhile, let our friends wait in patience and see the issue...."

#### Wyandott Corn.

To the Editor of the American Agriculturist:

You are about right as regards the Wyandott Corn. I planted some of it in 1856 in the field with the common eight-rowed corn, and when the latter was ripe enough to cut up the Wyandott had not tasseled out. One kernel planted in the garden, which had good care and was manured well, had seven stalks which grew ten feet high, and got so far along that the kernels had begun to form, about the 20th of October, when the frost killed it. The seed was genuine.

ONE WHO PLANTED IT IN ONEIDA CO., N. Y.

[It is useless to try the Wyandott Corn north of latitude 39° to 41°, for it will not usually ripen. South of 39° it may be well to try it on a small scale.—Ed.]

The tongue, like a race-horse, generally runs faster, the less weight it carries.

#### What is Soluble Humus?

To inquiries of Wm. Thomas, Talmadge, and others—*Humus* is a general term given to the brown or black decaying vegetable matter, muck for example, and also to animal substances, which are found in dark colored soils. A portion is usually soluble in water, and is ready to be taken up in the saps through the roots, to afford food or nourishment to growing plants. Removing standing water, and admitting air to humus, gradually changes it, nearly or wholly, into soluble humus—that is, available plant food. Since all kinds of plants and animal substances are essentially composed of the same elements (carbon, oxygen, hydrogen, and nitrogen), any plant in decaying furnishes the elements needed by any other plant. So any animal substance, especially lean flesh, as it decomposes, furnishes a large amount of the very best nourishment for any plant whatever.

#### Grass—Light and Heavy Seeding.

A correspondent writing from Kennebec Co., Me., queries whether the quantity of grass seed usually sown is sufficient, and, as an illustration, mentions a field which he seeded down with about one-half bushel of herd's grass, and some sixteen pounds of clover per acre. The result was a heavy crop of first-rate *finch* hay, which the stock, and especially calves, ate up clean. The past Winter he has been feeding out hay from another lot seeded with the usual quantity, (8 quarts of herd's grass, and 8 to 10 lbs. clover), which, on rich land, grew rank and coarse. He found much of this left by cattle, and questions whether what they do eat is as valuable as finer hay. The query, however, with him is, whether heavily seeded lands will not "run or bind out" sooner than where less seed is used.

We have several times, in former years, alluded to this subject. In our fifth volume (page 171) we gave the statement of Isaac Bowles, of Winthrop, Me., to the Kennebec Co. Agricultural Society, in which he states, that he cut 6 tons, 18 cwt. and 7 lbs. of well cured premium hay, in one season, from an acre and a quarter of land, at two mowings. The seed used was 30 lbs. of red and white clover, and one peck of herd's grass. Again, on page 56 of the same volume, allusion is made to a visit by one of the editors to Charles Downing's place, at Newburg, at a time when he was seeding down a piece of land with a *half* bushel clean timothy, one peck orchard grass, and four quarts of clover, to the acre.

Farmers usually sow too little grass seed. They need have no fear of its "binding out." A portion of the roots will die out, or be eaten by mice or worms, each year, and with spare seeding, and a part not germinating, vacant spots, or thin patches are very soon observed in the fields.

#### Profit of Raising Timothy Seed.

Enoch Engle, of Beaver Co., Pa., sends us the following results from 13 acres of Timothy. The seed was sown with the wheat in Autumn, and the expense of putting in, consequently, very little beyond the cost of the seed. The next season after the grain crop, the expenses of the 13 acres were:

Harvesting and putting in barn.....	\$17 00.
Threshing and cleaning.....	30 00.
Marketing.....	12 00.
Interest on land.....	39 00.
	88 00.
68 bushels seed sold at Pittsburg at \$3.25.....	221 00.
Leaving a profit of.....	\$133 00.
From this deduct at least \$13 for the first cost	



of seeding, which leaves \$120, or \$9 25 per acre—a very fair remuneration, though not more so than many other crops often give.

### Top Dressing Grass Land.

A YANKEE IMPLEMENT.

In the grazing districts, where butter and cheese are the leading products, farmers often find it inconvenient to take up sward land as often as desirable. It is considered a debatable question whether lands naturally adapted to grass, may not better be kept in good heart by top dressing, than by plowing and reseeded. Some very intelligent farmers claim that it takes many years to make a perfect sod well seeded with the best variety of grasses for the dairy, and that when this sod is once formed it should not be broken up—Of course they do not discard manuring, but apply it in the shape of top-dressing, as often as the land gives any indication of a decreasing yield of hay. They also accompany the dressing with sowing grass seed, where the sward is not sufficiently thick.

In Litchfield County, Ct., they have a very ingenious and simple contrivance, combining the advantages of roller and harrow, to aid in the work of top dressing. It is claimed that the manure benefits the land, just as it is made fine and available for the roots of the grasses. To accomplish this comminution of stable manure, they spread it upon the surface of the meadow, and go over it repeatedly with this peculiar implement—The framework is simply two large planks, such as are used for making stone boats or drags. The plank should be of the best white oak timber, two or more inches thick, two feet wide, and five or six long. Two of these are framed together in the usual way, and then the bottom is bored for harrow teeth—The teeth are made of steel, four inches long, and about an inch square. They are arranged in triangular shape, three triangles shutting into each other, and no tooth following its neighbor. It takes about forty teeth for a complete implement.

This breaks all lumps in the manure very finely, and makes small arrows among the grass roots, into which the manure is pressed by the drag as it passes along. It leaves the surface much less even than the harrow, and breaks the lumps better than the roller. Grass seed is put in with this implement in the best manner. By occasional top dressings, and scarifyings old meadows are kept in flourishing condition, and there is no loss of the grass crop, even for a single season.

We have never met with this Yankee contrivance in any other locality—It is considered by those acquainted with it, as better adapted to scarifying and smoothing the surface of grass land, than any other implement. It is not patented, and there is nothing to prevent any cultivator who chooses, from availing himself of its advantages.

### Removing Ergot from Rye.

To the Editor of the American Agriculturist:

Two years ago I had a small piece of rye, and from causes not known it contained a great deal of black rye, (*secale cornutum*.) Black rye or ergot is a poison, and my grain contained so much of it that I could not feed it. By accident—a very fine hog was destroyed by eating it. I have met with no mill or screen that will separate it, as much of it is as slender as the true grain. After various failures, I discovered that brine would separate it, the rye sinking and the ergot floating on the surface. This might, in some instances, be turned to profit, as the ergot is bought by drug-

gists and is worth much more than the rye itself. The salt should be immediately washed out and both carefully dried.

GEO. HILL.

Ashmeadow Farm, Lycom. Co., Pa.



Vetch—(*Vicia sativa*).

In response to various queries relative to the vetch, or tare, we introduce the above cut showing the general appearance of a branch as growing in the field. The vicia is a somewhat extensive class of plants, only one variety of which, the *sativa* (vetch), is cultivated, and even this is but little grown in this country. In England it is cultivated to considerable extent to feed out green as a soiling crop, and sometimes for pasture feeding. There is a Spring and Winter variety, both of which may be sown broadcast or in drills. The seed resembles small peas of a dark color, and the plant has somewhat the habit of pea vines, with papilionaceous (pea like, or butterfly shaped) flowers, which produce seed pods. About one bushel of seed is required for an acre if drilled in beds, or  $1\frac{1}{2}$  to 2 bushels if sown broadcast, it can be had at most seed stores for about \$3.50 per bushel. It is gaining favor with some in this country, as an annual forage or soiling crop, like millet. Cattle and horses are fond of it, and appear to thrive well while fed with it. It prefers a clayey loam, but does well on any good soil not too sandy or dry.

### Reapers and Mowers, &c....IV.

FIELD TRIAL OF IMPLEMENTS BY THE UNITED STATES AGRICULTURAL SOCIETY, JULY, 1857.

[Continued from page 103.]

To the Editor of the American Agriculturist.

I now quote a few of the blunders noted by Mr. Soper:

"The Sub-Com. evidently made a mistake of nearly one hundred pounds in the weight of Ketchum's Reaper, by error in subtraction, and in not deducting the weight of the plank twice, as two drafts were taken...."

"With respect to the draft of the Ketchum machine, he admits there is a mistake of one inch—a small matter, but a good deal upon a man's nose, or in testing the draft of a machine. With this correction the Ketchum machine was 69 pounds lighter draft than any other upon the ground, and for a day's work of ten hours, (according to the rule laid down in the Report, on page 51), the team would have to draw two millions four hundred and eighty-four thousand pounds less than the one of the lightest draft. In the language of the Report, is this 'a mere bagatelle'...."

"In table F, on page 77, it is stated that the Ketchum machine advances six inches to one vibration of the knife. The diameter of the driving-wheel is correctly given—36 inches, and 36 vibrations of the knife to one revolution of the wheel, and, for a wonder, these are correct. Now, ask any school-boy how far the wheel or machine will have advanced to one vibration of the knife."

Mr. Allen's Protest shows up such a continuous

series of tricks, blunders and final injustice, one lapping directly on to another, and each forming so close a part of the whole as to make it extremely difficult for me to quote from it. In fact, the entire Protest ought to be read from beginning to end; and, as it is printed for general distribution, I presume Mr. A. will be happy to send it to any applicant who may desire to see it.

The Judges praise Mr. Allen's machine more frequently and more highly than any other throughout their Report; and yet will it be believed that they give him only seven out of the one hundred merit marks adopted by them for the Trial! Perhaps they wanted to let him down "aisy," as an Irishman would say. The Judges say in their Report that—

"R. L. Allen's machine is one of excellent character—much better than appears from Table H, as will be seen from a comparison with other tables."...."It is very strongly built, the strength of material judiciously distributed, the workmanship is of the very best character, and the materials of the first quality. The seat of the driver is more convenient and comfortable than any other."...."The journal boxes are of composition metal, and it runs with very little noise."...."On the whole we consider this machine to be one of a very high character, light of direct draft, and *totally free from side draft*." [See page 40.]...."The guards in Allen's machine seemed of a very excellent quality."...."We think, too, that Allen's concave knife is a step in the right direction for reducing friction, and for diminishing the weight of the knife without lessening its strength.".... [See page 52.]...."To R. L. Allen—A diploma for his concave knife blade, and general excellence of material and superior workmanship" [See page 68]...."This machine runs with very little noise, showing that the gearing is well made, and the momentum very equally distributed throughout the machine. In most respects a first-class Mower." [See page 78.]

The italics are my own. Contrast the above with what the Judges say of the price, weight, complexity, clogging, uneven cutting, dragging, breaking down or not working on the most important day's trial of the First Prize machine, to which they awarded the Gold Medal,—and inform us, reader, if you can, how such decisions are brought about in this enlightened day. Mr. Allen winds up by the following spirited challenge:

"A fair test requires the working of machines throughout an entire season, in every kind of soil—whether sand, clay, or wet marsh; of surface—whether soft or hard, rough or smooth, stony, hillsides, deep and frequent water-furrows, and the like; in all kinds of forage—early and late; soft, fine, and wet grass: lodged and standing clover, &c., &c.; and the machine should sometimes be drawn by weak or ill-trained horses, half broken oxen or steers; driven by boys or unskilful drivers—under all the discouraging circumstances and disadvantages occasionally to be met with by farmers. Such a trial as this—for twenty or thirty consecutive days, cutting 10 or 12 acres each day, with a strict account of breakages and repairs, with an ordinarily constructed machine, the type of its kind—in all respects like those usually sold to customers—such is the test, if carefully noted by intelligent, practical and impartial men, I should deem conclusive as to the absolute as well as the comparative merits of rival machines; and to such, if it could be secured, I would fearlessly offer the Allen Mower."

The public had scarcely got over the ignorant, unjust decision of the Judges of the Massachusetts Agricultural Society's Trial the preceding year, when this of the United States follows rapidly in its footsteps. Had I an enemy whom I wished to injure deeply, and hold up to unmitigated contempt, I would contrive to get him appointed a Judge on the next "Grand Trial of Harvesters;" and then further induce him to assist in preparing a Report of the same. "Oh that mine adversary had written a book," cried in his smitten anguish the sorely afflicted Job:

meaning from this, we may suppose, that it would have contained so much folly as to have surely been the intellectual death of him—and ah, what a death!

In my last I asked, "Was not one of the most influential Judges in this decision (meaning that of the Syracuse Trial,) an agent for the machine at Columbus, Ohio, to which the first prize, the Gold Medal, was awarded?" As I have received no reply from him to this question, I beg to say that I am informed from other good and reliable sources that he was! Now, I have a few more questions to ask.

1. Previous to the commencement of this Trial did not the Honorable Chairman of the Judges ask him, in common with all the other Judges, if he was in any way interested in any machine entered to be tried at Syracuse?

2. Did he not to this question give an emphatic "No"?

3. After the Ball, Aultman & Co., or the Miller & Aultman, (for the two are so mixed up in the Report I cannot tell which is which), machine broke down on the first day's trial, did he not report the following morning to the Judges, or one of them, that he had gone the preceding evening with another Judge and cut one of the allotted pieces of clover with the same machine which had broken down, or had not worked that day, and in consequence of this Report was allowed to go on with the remaining trials; and thus unfairly and unjustly, mainly through his influence, obtained the first prize?

4. When subsequently asked for the proof of all this before the Judges in full session, did he not back out of the assertion, and say that he might have been mistaken in the machine—he thought it had been tried, &c.?

5. Was it not proved during all this time he said it was at work that the machine was lying in some shop to be repaired?

I do not assert these three last questions to be facts, I only ask if they are not? And if they are, how could the Judges allow such an enormous wrong, if wrong it were, to go unpunished! I think it behooves each one of them to clear his escutcheon in this matter, and the sooner he does it the better the public will think of him.

I did propose going on further with this Report, but what is the use? Its praise or its blame—its sins of omission or commission—are alike unworthy the notice of any just or honorable man; and had I known when I began these articles what I now do of its demerits, I should never have troubled myself by writing a word on the subject. Silent contempt should have been its treatment on my part.

I intend hereafter to make some comments on the famous Massachusetts Trial, in 1856, as well as that of Ohio, in 1857, when I get the Report of it, for I have attended them all. I have a sort of passion for such things; not because I am interested pecuniarily in any mowing or reaping machine living, but merely as an amateur. I have my own notions as to which are the best machines for reaping and mowing, and how they can be still further improved and made more available; yet, for the present, lest I should be accused of partiality, I choose to keep these ideas to myself.

H. L.

Syracuse, N. Y., March 17, 1858.

**251 LBS. OF BUTTER TO THE COW.**—The Montpelier (Vt.) Watchman, states that Herman Powers, of East Montpelier, kept 17 cows the past season from which he made 4,020 lbs. of butter. Allowing one cow out of the number to support the family, will leave a fraction over 251 lbs. to each cow. We should be better pleased to know

further the breed of cows, kind of pasture, length of time occupied in making the above amount, &c.

### Gargety Cows.

To the Editor of the American Agriculturist.

I have a cow which for about two months has been giving bloody milk from one teat, while the milk from other teats, is, to all appearance, pure. If I omit milking once or twice, the blood becomes clotted and difficult to draw. Will you please to explain the cause of it, and also the cure for it, if there is any.

J. & K.

Mason Co., Ill.

#### REMARKS.

The cow probably has the *garget*. The causes of it are various—ill usage of the bag, oftentimes; accident, at others. A careful milking out of all the matter that will flow from the diseased teat; bleeding of the cow, if in good condition; or a dose of purifying physic, like salts, milk and molasses, or other mild medicines are what we should use. We have had cows occasionally so affected, and have given moderate doses of the root "poke-weed," called *garget-root* in some places. This, or one of the remedies above will usually effect a cure, but not always. If the disorder prove obstinate, so as to injuriously affect the cow, we would dry, and subsequently fat her for beef, unless she were of more than ordinary value. The disease being confined to the teat would disappear when the cow is dried, and she would not be injured for beef.—Ed.]

### To prevent and cure swelled Udders in Cows.

To the Editor of the American Agriculturist:

For sometime before and after the cow calves keep her in a warm dry place, and do not let the cold winds blow upon her from some window or crevice. Give her exercise in the open air, but do not let her lie down on the cold, wet ground. Clean out and change the litter twice a day. If the udder swells and becomes hard rub it faithfully, several times a day with the following ointment:

Heat one quart of hog's lard in an iron kettle until it smokes pretty well, and is somewhat blackened or burned; then let it become nearly cold and stir in  $\frac{3}{4}$  pint of spirits of turpentine. Be careful and not add the turpentine when it is hot.

The above recipe I believe saved a cow of mine, and I have known of its curing other cases. As the complaint is common, I hope it will do good by being generally known. OREN O. STEWART.

Union, Maine.

### Feeding Poultry.

Rev. A. DuBois, of Richmond Co., O., sends for the *Agriculturist*, the following items from his experience in feeding poultry: I have 28 chickens large and small, several of them Fall chickens. I obtained but a few eggs the fore-part of Winter—not more than one or two a day. The feed was corn and oats. In January I tried the experiment of hot feed once a day, in the morning. As soon as the fire was started in the cook-stove, I put a quart or so of small potatoes in an old dripping pan and set them in the oven. After breakfast I took a quart or more of wheat and buck-wheat bran, mixed, put in the swill-pail, and mixed into a thin mush with boiling water, then added about 1 quart of live coals from the stove and put in the potatoes hot from the oven, adding all the egg shells on hand, and some times a little salt, and

some times a little sulphur. These mashed together are fed immediately in a trough prepared for the purpose, made about 10 feet long, of 2 boards 6 inches wide, nailed together, and two short pieces nailed on the ends, with a narrow strip nailed lengthwise on the top, and two bearers under. The object of this was to keep the hens out of the trough, and leave room to eat each side of the narrow strip. At noon I fed 6 ears of corn cut up in pieces an inch long; and in the evening oats and wheat screenings about 1 quart. Now for the result. In about a week the number of eggs increased six fold and in about two weeks, and since, they have ranged from 12 to 20 eggs per day. The coldest weather made no difference. When it was cold and stormy I kept them in the hen-house all day, and generally until 10 or 12 o'clock. Such singing over the corn at noon I never heard from hens before—a concert of vocal music that would have done any lover of eggs good to hear.

### Poultry Raising is Profitable.

To the Editor of the American Agriculturist:

Seeing a piece headed, "Will Poultry Pay?" leads me to give my experience. One year ago, I wintered 22 hens and three roosters. I commenced to keep an account of their proceeds in March, and up to the beginning of this year they had brought me \$50.63, with a stock of 74 hens and 150 eggs on hand, besides supplying a family of four persons with eggs and chickens. I sold the eggs for about 14 cents per dozen, and the chickens at 8 cents per lb. I kept no account of their feed, as they run at large, and picked up much of it. Sour milk is very good for hens. They will drink till it runs out of their mouths, and then they do not have much inclination to scratch. I find they do little injury when their crops are kept full. They will not do near as well when shut up, and if they are not well kept there is little profit. Grain is so cheap here that it is better to feed it out than sell it.

MARY KELLY.

North Lamartine, Wis., Jan. 16, 1858.

### Grubs and Wire Worms in Corn Fields.

Sward land, plowed in the Spring for Corn, is often found filled with worms which are sure to make great havoc with the seed unless they are exterminated. The following is an excellent remedy: After turning under the sod, sow broadcast a bushel and a half of fine salt to the acre, and harrow it in, following with the roller. Soak the seed in tepid water about eighteen hours. Dissolve two ounces of sal ammoniac and add it to the water. This amount will answer for a bushel of seed. Plant the corn soon after sowing the salt. The seed will germinate quickly and the plants will come forward at once. Between the salt and the ammonia, the corn will suffer little from the worms. Who will try this, and send us a report of his success, in the Autumn! \*

VERMONT AGRICULTURAL EXHIBITION LOCATED.—The State Society has decided to try the experiment of holding the Annual Exhibitions in one place, to save the expense of erecting new buildings every year. The next three Fairs at least are to be at Burlington, that of the present year (1858) to open on Tuesday, September 14 and continue four days.

A lad asked a physician whether snuff was injurious to the brain. "No," said he, "for nobody who has any brains ever takes snuff."



### The Spotted Squash Bug. (*Coccinella borealis*.)

There is a large family of insects of the order Beetles, (*Coleoptera*), called *Coccinellidae*, which has a very wide geographical range, being familiar to the farmer as well as to the entomologist, in this country and in Europe. Their common names are Lady-bug, Lady-cow, Lady-bird. There are many different species in this family, varying in their size and color. Some are of a dark or black color, with yellow or red spots; others have a yellow or red ground, with black spots. Some have only two spots, while others have twenty or more. This family, with few exceptions, are insectivorous—that is, feeds upon insects; indeed, until recently, entomologists have given the entire family of *Coccinellidae* the credit of being our friends and aids in diminishing the number of destructive insects, such as Aphids, or Plant-lice. The cultivator may therefore be perplexed, by finding that Harris, and other writers, urge us to spare the Lady-birds, while the evidences of the injury produced by a disreputable member of this worthy family are unmistakable.

The accompanying cuts, Figs. 1 and 2, give a vertical and side view of the *Coccinella borealis*, which to some of our readers will be entirely familiar, while others may never have seen it. In some localities in New Jersey, New York and



Fig. 1.



Fig. 2.



Fig. 3.

Figs. 1 and 2—The *Coccinella borealis*, or Lady-bird.  
Fig. 3—The same insect in the larva or worm state.

Connecticut, it has been a very troublesome visitor, entirely destroying the foliage of the squash vine, even after the plant has reached a large size, and is in full bearing.

In no work have I been able to find any mention of this insect, except in Dr. Emerson's excellent "American Farmer's Encyclopedia;" and even there in the description accompanying the figure, it is said to be insectivorous; but under the head of "Squash-bug," the true habit of the insect is given, with the name of "*Coccinella borealis*."

As in several respects its habits are interesting and peculiar, I will give the result of a few observations, made during the Summer of 1856.

The form of the perfect insect is nearly that of a hemisphere. Like all beetles, it possesses horny wing-cases, which, when closed, cover a pair of folded membranous wings. Its legs are yellow, quite short, being scarcely seen when looking at it from above. The head is very small, as compared to the body, and is so covered by the thorax as to



Fig. 4—A magnified view of the head of the *Coccinella*. be almost invisible. Fig. 4 gives a greatly magnified view of the head and the thorax, the latter covering the former like a hood. *a* is the thorax, on which are several spots; *b b* are the eyes, which are compound, or formed of a number of smaller

eyes arranged in rows; *c c* are the antennæ; *d* the mandibles or forceps with which it cuts its food; *e e* are movable jointed organs of the mouth, which serve as fingers or feelers, and are called *Palpi*.

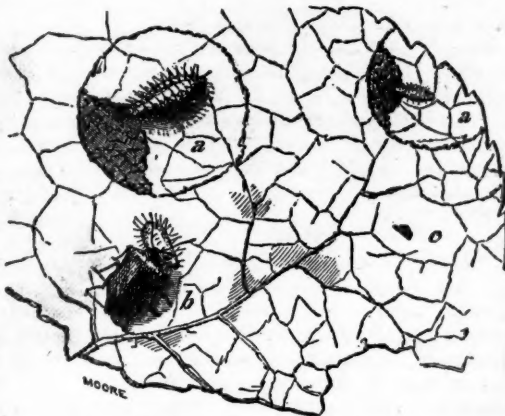


Fig. 5—*a*, The larva feeding within the circle. *b*, An insect which preys upon the larva. *c* Size of the larva when first hatched.

The color is a dull yellow of uniform shade, but having on the thorax and wing-cases, nineteen black spots, (counting as two each those which are divided by the suture of the wing). It is first seen early in June as a perfect insect, feeding in the day-time upon the upper surface of the leaf. It has a singular habit which I have noticed in no other insect. In feeding, its first act is to mark out with its foreceps a circle or semicircle, sometimes of great regularity, inclosing the portion of the leaf upon which it is about to feed. The leaf is then eaten within this mark, and nowhere else. The larva, or worm, observes the same habit of marking out its pasture ground, as seen in Fig. 5, *a*. The insect is not quick in its movements, and does not readily take wing, but when disturbed, draws its legs and antennæ under its body and falls to the ground. Shortly after its first appearance it is found in pairs, and soon after commences to deposit its eggs. These eggs are placed in irregular groups on the under side of the leaf. When first hatched, the young larva, Fig. 5, *c*, is very small, of a chrome yellow, and armed, even at this early period, with thornlike spines. One of these spines, magnified in Fig. 6, shows the formidable character of this natural defence. These larvæ eat voraciously, and grow rapidly, casting their skins several times. A magnified view of the larva is given in Fig. 7.

They have six true legs, and use the tail, or posterior extremity in walking, as a seventh leg. After attaining the size represented in Fig. 3, they crawl to some sheltered spot on the under side of the leaf, or upon the stem, and fasten themselves securely for the change to a pupa or chrysalis, the pupa case being the thorny skin of the larva. Remaining in this dormant state something over a week, it then emerges as a perfect insect, and if not too late in the season, recommences the propagation of its species. It may be found upon the squash vine, of all ages at once, from the first of July to the middle of October, showing that many successive broods are hatched irregularly through the Summer. In Fig. 5, *b*, is represented an insect, which in several instances I have found preying upon the larva of the *Coccinella*, by inserting its proboscis in the body of the latter, and sucking out its contents. On



Fig. 6—Magnified view of a spine of the young larva.

being disturbed, it carried off the larva elevated on the end of its sucker. This insect destroyer must not be mistaken for another squash bug of similar shape, but larger, which is exceedingly destructive to this plant.

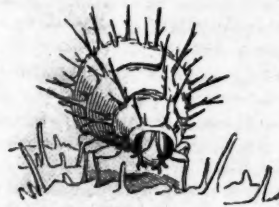


Fig. 7—Magnified view of the larva.

The only remedy which I have found effective to prevent the injury from the *Coccinella* is hand-picking. Lime, dusted upon the leaf while wet with rain or dew is some assistance, but will not be in itself sufficient. A small basin, or cup filled with strong brine, to brush the insects into, can be used advantageously; and remember that one hour spent in this work when the insect first appears, and before its eggs are laid, will be of more service than many hours after that time.

A. O. MOORE, in *Country Gentleman*.

### "A Bloom of Beauty."

Though we treasure and value them, we should hardly dare to copy one in a thousand of the complimentary sayings of our cotemporaries, respecting the *Agriculturist*, lest our readers should think us gratifying our own vanity at the expense of space belonging to them. But the following we must transfer here to have opportunity to reciprocate the sentiment of the closing paragraph. The *Well-Spring*, Edited by Rev. Asa Bullard, and published weekly by the Mass. Sabbath School Society, is a beautiful "child's paper," and is indeed scattering good seed wherever it goes. In the number for March 26, under the caption of "A Bloom of Beauty," the *Well-Spring* says:

The Editor of the *American Agriculturist* of New-York, a few months ago, offered a premium of a few choice "field, garden, or flower seeds," to all his numerous subscribers, and also to those who would procure new subscribers. The list of seeds contains 51 different varieties—of which thirty are flower seeds.

What perfume, and beauty, and waving fields of grain and fruit, will these seeds cause to spring up, by-and-by, around some 40,000 or 50,000 dwellings all through our land! What a bloom of beauty those flowers would present, could they all be collected together in one immense garden! Is not this a pleasant device of the *Agriculturist* to spread fragrance, and beauty, and luscious fruits, over the land?

And if our little paper, 'The Well-Spring,' scatters good seed wherever it goes—as we trust it does—what a glorious array of the 'plants of righteousness,' are everywhere springing forth, converting many a Sabbath school and family garden into the 'garden of the Lord.'"

An idler boasted to a farmer of his ancient family, laying much stress upon his having descended from an illustrious man who lived several generations ago. "So much the worse for you," replied the farmer, "for we find the older the seed the poorer the crop."

A Grecian sage was asked, why philosophers ran after rich men, while rich men seldom courted philosophers. He replied, because the latter know they want money, but the former fail to perceive that they need wisdom.

Fig. 6—*ABIES EXCELSA*, OR NORWAY SPRUCE.

### Evergreens.

[Continued from page 113.]

The Norway Spruce Fir, (fig. 6.) may, without exaggeration, be proclaimed the finest of evergreens. Estimating, as they deserve, all its qualities when young and when old, in its Summer and Winter garb, in its native forests and in cultivated grounds for ornament and for use, it stands peerless. A native of the mountains of Northern Europe, it is everywhere hardy and easily cultivated. It is one of the largest of forest trees, attaining often a height of 180 feet, with a straight erect stem, regular, wide spreading branches, and foliage of a rich deep color. We note some of its desirable characteristics:

It is nearly a first-class timber tree, and as such may probably be profitably cultivated in the timberless districts of the West. It is truly an elegant ornamental tree, and from its hardy rapid growth, will rarely be omitted in large or small plantations. It is beautiful as a single specimen-tree, and combines well with other trees in groups or masses. It is peculiarly well adapted to the purpose of *hedging*, as it bears the shears well, thrives even when crowded, and branches low, near the ground. It is advantageously planted as "a nurse" to other trees, and is deserving of more frequent use in this manner. Branching near the ground it prevents evaporation from the soil, while its spiral top does not in-

terfere with the spreading head of deciduous trees, and its thick evergreen foliage is a good screen from severe or cold winds. Added to these, it

Fig. 7—*ABIES DOUGLASHII*, DOUGLAS' SPRUCE FIR.

bears transplanting well, as its roots are fibrous, running near the surface of the ground.

When young its branches grow regularly in whorls with an upward curve, but when old, and after exposure to storms, and the weight of

Fig. 8—*PINUS LARICIO*, THE CORSICAN OR LARCH PINE.

snows, they droop gracefully, and are in the highest degree picturesque. From the exuding sap of this tree is formed the well-known Burgundy Pitch.

The Douglas Spruce Fir, (fig. 7) is a native of the Oregon coast, where it forms immense forests, and grows to a height of 180 feet, and sometimes even reaches a greater height. The stump of a tree on the Columbia river, measured at 3 ft. from the ground after the bark was removed, 48 feet in circumference. The leaves are dark green above, and a silvery white beneath. It is hardy in this latitude, and is a free grower, which will render it a desirable tree for general cultivation. Our engraving represents a young tree. In vol XVI, page 108, we gave an engraving of a much larger tree.

### THE CORSICAN OR LARCH PINE.

This is a native of Southern Europe, and has been considered so valuable a tree that the French government has made repeated attempts to introduce it, and it has at last become thoroughly domesticated in that country. It has been grown successfully in England and even in the Highlands of Scotland, although in the latitude of New-York, it is frequently injured by the Winter. At Philadelphia it is entirely hardy, and forms a beautiful pyramidal tree with long, dark, green leaves, the branches growing in whorls with considerable regularity. It is a rapid grower, and attains a height of 80 to 100 feet.





Fig. 9—*ABIES SMITHIANA*; SMITH'S, OR THE HIMALAYAN SPRUCE FIR.

This forms a beautiful pyramid of about 50 feet high when full-grown, and is a very ornamental tree. It grows rapidly, and in sheltered situations it is hardy as far north as New-York. Mr. H. W. Sargent of Fishkill Landing, says that in his grounds its foliage was *browned* by the Winter, but the buds were good. It is deserving of a place in every collection, if a favorable position can be given it.

#### BROAD-LEAVED EVERGREENS.

All the foregoing are of the class called *Conifers*, and are terebinthinate or resinous trees, having narrow leaves. But besides these there are a number of fine evergreen trees and shrubs of the broad-leaved kind. Of these, the magnolias are foremost in beauty.



Fig. 10—*MAGNOLIA GLAUCA*.

The *magnolia glauca* (fig. 10) is a small tree, growing from Massachusetts to the Gulf, attaining a height of 12 to 20 feet. It has an abundant white bloom, which continues, when in favorable locations where it has abundant moisture, during the whole Summer, rendering the forest very fragrant. The leaves are smooth, of a bluish green above, and though it sometimes loses a portion of its leaves in Winter, it may fairly be con-

sidered an evergreen, and has the advantage of being perfectly hardy.

The *Magnolia grandiflora* (of which fig. 11 below, represents the leaves, and fig. 12, on the right the blossom,) is really a princely tree. It is a native of the Carolinas, and is justly the pride of the South. Strangers, seeing for the first time these magnificent trees in their native forests—a hundred feet high, covered with large, snow-white blossoms, imbedded in clusters of dark, shining leaves nine inches to a foot in length, the air for miles around, being filled with perfume—are always overcome with rapture. No tree of the forest equals this in regal magnificence. The majesty of its form, its thrifty, luxuriant growth, and the ease with which it is cultivated, are bringing it rapidly into use wherever the severity of the Winter does not forbid. A French sea-captain at New-Orleans carried home one of these plants and set it in his garden, where it, at first, attracted no attention. After some years, however, its magnificent blossoms excited admiration, and its fame finally reached the *palace*. The royal gardener was dispatched to, ascertain whether a removal could be successfully made. The tree was by this time some thirty years old,



Fig. 11—LEAF OF *MAGNOLIA GRANDIFLORA*.

and it was decided that the risk was too great, so that it continued to grace the humble garden of the Captain. After this it was burned nearly to the ground by a fire which destroyed the adjacent dwelling, but the next season it produced a vigorous new shoot.

#### HINTS ON TRANSPLANTING EVERGREENS.

The great obstacle in the way of widely extended cultivation of evergreens is the difficulty in transplanting them successfully. While a few persons will transplant thousands with a loss of scarcely one per cent, many others find that their trees either die, or "grow shabby," in spite of all their care and pains-taking. The chief causes of failure are:

1st. The planting of trees taken from forests or uncultivated grounds. This is a point not understood by persons of limited experience, but which is well established. Any tree, carefully removed and well planted and cultivated, is much more easily re-transplanted than one taken from the spot where it originally grew; and after several judicious removals when the plant is young, it may then be, with perfect safety, transferred to the spot where it is to remain, even after it has obtained considerable size. The reason is obvious; the roots which naturally extend laterally and downward to distances not easily reached by the spade, are cut off in transplanting, and in evergreens a constant evaporation is taking place from the leaves, before the roots left are able to supply the demand for sap. If, however, a seedling tree is planted in a bed of rich soil, its roots are more fibrous, and it does not form those long,



Fig. 12—FLOWER OF *MAGNOLIA GRANDIFLORA*.

naked roots seen in the wildling. If, moreover, it is taken up when one or two years old, and its roots by this means shortened, a larger quantity of small fibrous roots will start near the body of the tree, so that they are easily taken up without injury. It is therefore an excellent practice to dig a trench around the tree intended for removal, in the Fall, or early in the Spring, deep enough to cut off all the roots 12 to 15 inches from the body of the tree, if the stem is less than two inches in diameter, and from 1½ ft. to 3 ft. if larger. The trench is to be filled with rich soil. This will induce the formation within the trench of those small roots so essential to the nourishment of the tree. In the succeeding season the tree may be safely removed.

2nd. An exposure to the sun or drying winds, though injurious to the roots of all trees, is peculiarly hurtful to evergreens. Dr. Warder, in his work on "Hedges and Evergreens" says: "In all the resinous or terebinthinate trees the proper juices of the roots are of such a character, that when once dried they cannot be restored to their fresh condition by the application of water or moisture, as is the case with most deciduous trees." These two causes of failure are sufficient to account for the loss of the great quantities of trees brought every Spring from the mountains, by the wagon load and boat load, and sold *very cheap* after a few weeks of exposure in transportation and sale.

3rd. The planting in narrow holes and unprepared soil is a frequent cause of failure. Ample space should be allowed for spreading the longest roots in a natural position, and the soil should be moderately rich and finely pulverized. No fresh animal or other rank manures should be used, but leaf mould, or rich soil from the garden or old pastures are desirable immediately about the newly planted roots. Wherever it is possible, the tree should be taken up with a ball of earth adhering to the roots; this is always a great additional security in removing evergreens.

#### A Look at the Evergreens

[We had hardly printed the April number containing an illustrated article on evergreens—which was written in connection with the one in the present number—when the following from a distant contributing editor came in. It treats the subject somewhat differently and from a more northern point of observation (latitude 43°). We can hardly print too much on this subject during this evergreen-planting month.]

A first look to see how we like them. During the past Winter, they have battled bravely with the winds and defended our premises from the stormy blasts. They have kept up a cheery look, amid surrounding desolations. In the early part of Winter, before the snow fell, they gave our grounds almost the look of Summer. And through

all the cold season, they have appealed pleasantly to the ear, as well as to the eye; for the sound of the wind through their branches was a soft, silvery murmur, while in deciduous trees, it was a cold whistle. They have appealed to the heart, likewise, by their steadfast verdure. Such is friendship, we have said, the same in all weathers and throughout all the year.

They address, also, the taste. What symmetry, and yet what gracefulness; how this one vaults up from the ground, and throws abroad his giant arms in the air; how the branches of that one droop and sway about, with the least motion of the wind! What depth and richness they give to the coloring of the landscape! Our private grounds and our general scenery would be tame and monotonous, if they were destitute of this class of trees.

A second look, to see which we like best. But it will take a long look fully to settle that question. We can say, however, almost at first sight, that we don't like the tender ones. Some of the delicate creatures are very beautiful, when growing in their native climates, or when nursed, as small bushes, in a green-house. But to see them pinched and frost-bitten and half-killed by our boisterous Northern Winters, gives the beholder a feeling of positive discomfort, and sorrowful pity. There is a felt incongruity in their situation. If one has no sympathy for the poor things, he must at least see that they lose much of their beauty by being frozen nearly to death every Winter. What a forlorn object is this one with its leader cut off, and that with its branches dead on one side, and that with nearly all its foliage as brown as sole leather! No: give us the hardy ones, those which can rough it through the coldest Winters. And of this sort there are enough in every latitude to give needful variety.

But, sir, says some inexperienced planter, please look a third time, and long enough to tell us the names of some of the best hardy ones. Here, then, is a list of the best evergreens which may be relied on as hardy as far North as Albany:

**Pinus:** White or Weymouth, Scotch, Austrian, Cembrian, Norway, Corsican, Dwarf or *humilis*, *Pinus ponderosa*, and *Sabiniana*. *Pinus excelsa*, or Bhotan pine, is a beautiful variety from the Himalaya mountains, of a silvery hue, and a waving, graceful habit, but will not be found hardy North of New-York. The Scotch and Austrian, retain their colors in Winter better than the native white, but their foliage is not as soft and agreeable to the eye.

**Arbor Vitæ:** The American and Siberian. The American is often, but improperly, called White cedar. The white cedar is as distinct from the arbor vitæ as the Red cedar is. The American arbor vitæ is a very useful tree for screens, and is sometimes handsome enough for an ornamental tree; but its commonness and its rusty look in Winter, make it objectionable to many eyes. The Siberian is better than the American, being equally hardy, more compact in its foliage, and retaining its greenness better throughout the Winter. For an ornamental screen, it is second only to the hemlock.

**Junipers:** The Swedish, common American and Red cedar. These all make medium-sized trees. The foliage of the first two is light green, with a bluish tinge. Some specimens are compact and pyramidal, others loose and spreading. By a little tying-in and pruning of the branches, they can nearly all be made into dense columns of verdure, resembling a miniature Italian poplar. The Red cedar belongs to the juniper family. It is not always a well-formed tree; but in some localities—as, for example, on the shores of the Hudson river—it often becomes very beautiful.

The Savin and the Trailing Juniper, are undoubtedly hardy, but have little else to recommend them.

**Firs:** Common Balsam Fir. The European Silver fir is a neat, symmetrical tree. It is superior to the native fir in at least one respect, that it retains its foliage throughout its entire extent, better in old age. But its leading shoot is often killed in Winter, and where this happens frequently, it of course despoils the tree of its beauty. It can hardly be recommended for the latitude of Albany.

**Spruces:** Norway, Black, White, Red, and Hemlock Spruces, are all hardy and worthy of planting. The Norway is fast becoming the most popular evergreen in the Northern States, and deservedly so. It needs no recommendation from us. The Hemlock is also winning its way into the hearts of amateurs, as being, on the whole, the most beautiful of all evergreens. We shall have more to say about this, our favorite tree, at another time.

**Yews:** The American, the English and Irish yews may be carried through the Winter, by giving them a protection of cedar boughs or of straw, but they come out in Spring more or less "cut up." The American is tough as an oak, and with a little training, makes a neat, small tree. It retains its greenness best in Winter, when planted in the shade.

If, now, any of our readers can testify from *certain knowledge*, of the hardness of any other evergreens along the parallel of latitude we have taken for a standard, we should be glad to hear from them. There has long been a lack of definite and reliable information on this subject, and those who know anything on the subject have acquired their knowledge by costly experience. Many new conifers, lately introduced from Northern Europe and Asia, and California and Oregon, promise to be great acquisitions. It must, however, be several years, before their hardness is settled beyond a doubt.

### The Orchard...V.

AMERICAN PEARS.

(Continued from page 115.)

Taken altogether, those varieties which have originated on our own soils have, thus far, proved most promising for orchard cultivation. The Seckel is, perhaps, the best pear we know—better even, than the Vergalieu, whose European origin dates "far back in the ages," and until the Seckel was discovered, excelled in flavor any other pear known. This superb variety, by fatality—the cause, and remedy yet undiscovered—has taken a disease which for some years past has rendered it, in most localities, worthless, and discouraged us from attempting its cultivation in the future, bating all the nostrums which pomologists, geologists, and the whole community of savans have prescribed for its relief. The Tyson, the Bloodgood, the Osband's Summer, the Sheldon, the Fulton, the Buffum, the Lawrence, and many others, taking their type in flavor and excellence from well known foreign varieties, crosses of which they probably are, yet re-invigorated, as seedlings, in American soil, supply all the nicer qualities of our European importations, and in their superior native vigor and hardihood, bid fair to supplant the foreign varieties which we have heretofore cultivated, and for future generations, supply us with all that the most fastidious palate can demand in a perfectly luxurious pear. To them, and them only, with perhaps a few foreign exceptions, we would resort for successful cultivation in the orchard. We do not name the locali-

ties where they can best be placed, leaving them, as with certain varieties of the apple, for individual experience, and observation to decide.

### THE QUINCE STOCK, OR DWARF PEAR.

In discussing this, we may tread on somebody's bunions, for which we certainly have no particular inclination, and shall regret it if such be the fact. Nevertheless, as it belongs to our subject, and having an opinion, we shall not hesitate to disclose it. For elucidation, let us recur to a scrap of recent history. Thirty, forty, or perhaps fifty years ago, dwarf pears, worked low on the Quince stock, were imported into Boston, Massachusetts—possibly a few other towns, and cultivated with more or less success, in the choice grounds of a few amateurs. Of these the public knew little, or nothing. In the year 1846, the late Andrew J. Downing, the fragrant odor of whose memory will long survive in the remembrance of every true pomologist, commenced his admirable journal, "The Horticulturist," and in a short time afterwards brought the fact of the existence and success of these dwarf pears into notice, with high encomiums on their excellence, and a recommendation of them to public favor. With the lately growing pomological taste of our American people, now spurred on to increasing efforts by the action and intelligent mind and pen of Downing, an intensity of appetite, little short of a furor, was created among our pomologists, and, young America like, they "pitched in" to "dwarf" culture with a spasmodic activity scarce exceeded by the eager scuffling for precedence and possession which the discovery of the mines of California a year or two later developed. Nurseryman, amateur, layman—if such last term can be, in pomology—went incontinently into their propagation and in less than five years dwarf pears enough existed in the country, if successfully planted out, and cultivated, to supply every decent family in the United States, at its daily dinner table, throughout the entire pear season. Yet, when the stern lessons of experience had begun to cool down the ardor of experiment, three or four years later, it was ascertained that but few varieties would succeed on the Quince; that the common Apple Quince Stock of the country was unfitted for working them, and that the "Angers" was the only wood, in its stout and vigorous growth, which would sustain the pear at all. The nurserymen had dipped in largely, of course, and the unsuspicious public, taking all as gospel which "the papers" had said about the dwarfs, gave them a capital benefit, reserving only to themselves the privilege, "solitary and alone," of leisurely chewing the cud of repentance over their fading investments, and agreeable anticipations, afterwards.

Following the discovery that the Angers was the only Quince Stock on which the pear could succeed, it was soon after found that but a few varieties of pear would even adhere on them and grow to successful bearing, while the appalling fact was promulgated, that Rivers, the celebrated pear grower of Sawbridgeworth, near London, could name only four—and but one or two of them a really choice variety—which he would dare to cultivate! Our pomological doctors soon set to work, through the oracular machinery of their still ubiquitous conventions, to rectify their previous error, gave some recognition of the wisdom of Sawbridgeworth, and sought to make new schedules of the "refractory," and gave still further license and encouragement to "successful" varieties, "sure" on the quince. One, and another of these deliberative bodies of savans adjourned, each self-convinced that it was "sound on the goose," and gave, through the publication of their "pro-



ceedings," their *ipse dixit* of what was "flesh, fish, or good red herring," on this momentous topic. And so it stands at this present writing.

Now, if any of our sagacious readers can discover in what we have said, or, what is still more reliant with themselves, in their own experience, any substantial facts on which to base their future action in dwarf pear culture, more than that the whole matter is enveloped in a bank of fog, or controversy, they certainly have achieved more than we have been enabled to do after an investment of more money, time, "special" manures, and land in the enterprise than we at this moment care to tell of.

That individual plantations of dwarf pears to a limited extent have succeeded, in certain localities, and with certain varieties, with great care, and great comparative expense, we shall not deny; but that the public are aware of any one individual dwarf orchard, where pears are successfully grown on the Quince, as a remunerating market crop, we shall be right glad to hear. Nor will we condemn the propagation, or the cultivation of the dwarf altogether. For him who has only a small garden, or but a limited space of ground, or who wants pears immediately, and is willing to invest a moderate outlay in a few trees for his own family supply, and is willing to encounter the pains and penalties of their purchase, cultivation, and the early deaths and disappointments of which a portion of them are sure to become the victims, we say: go on, and succeed, as best you can. The recompense may be worth the trial.

#### MY DWARF PEARS DO NOT SUCCEED.

Nor, shall what we have said be left without a reason: The dwarf pear being budded on the Quince root, that root requires Quince culture, and the Quince is far from being a universal grower on our soils. In some localities it flourishes freely. In others it is more or less refractory. As a matter of course, the pear thus Quince-grown is likely to do better or worse, as the soil in which it is planted is congenial, or not, to the Quince. But, to our apprehension, there is a still more cogent objection; the pear is a free-growing, open-pored wood, drawing, in its natural condition, largely of sap from its own vigorous, expanding root. The Quince, on the contrary, has a close, compact wood, its sap vessels, or pores are small, and its sap more sluggish in action, fed through the fibrous spongyoles of its contracted and home-bound roots. There is, consequently, an incompatibility in those two widely discordant woods to unite and constitute a perfectly combined trunk through which the root sap of the one can flow, by way of the imperfect embrace, into the wood, and leaf of the other; and so back, from the outer and upward leaf of the pear, down its branching wood and trunk, to the root of the Quince. Such difficulty, in our judgment, tells the whole story. That a very compact pear wood may connect more kindly with an uncommonly open pored Quince, so as to make an exception to the rule, we will not deny; but, as a principle, we stand convinced in our own theory, which, we still contend, is fortified by experience. We have said our say; and so it may rest, until a newer light than we have yet seen, shall convict us of error.

#### INCIDENTAL REMARKS.

The upshot, then, of our conclusions, is that the pear is a fruit of uncertain and precarious growth, and duration. More liable to casualty by diseases not understood—of which the various kinds of blight are far the most destructive—and uncongenial to many soils, and positions, it can not be safely undertaken to any extent except in well tried localities. The finer varieties have proved

far more uncertain than the rougher, and less valuable—the latter retaining their health, vigor, and bearing, while the others, with exceptions, however, become diseased, and prematurely die. For a family luxury, almost any pains and expense may be tolerated to acquire them; but as a market fruit, an investment in a pear orchard may, as a general proposition, be questioned. For the last twelve, or fifteen years innumerable pear orchards, both on their own stocks, and the Quince, have been planted. Pears—choice ones too—are much more abundant as a household fruit, than formerly; but in market, good pears are scarce, and dear as ever; and the common chokey puckery things are not worth either cooking or eating, a good apple being far better for either. We can name scores of extensive pear orchards planted out with high hopes and anticipations within the past ten years, and have since seen them scattered, root, and branch, or if they still exist in name, a few struggling survivors only mark the ruin which disease and death has made among them. We speak now of the better classes of pears, while a man would be foolish to plant out wildlings for grinding into "perry," or raising "choke-pears" for market.

To sum up: Let every land holder, and house-keeper with garden room sufficient, plant out his Tysons, Bloodgoods, Osband's Summer, or other sure early kinds, for the first of their season. Let these be followed by the luscious and noble Bartlett, for early Autumn. Succeed those with the Buffum, Flemish Beauty, Virgalieu,—if it will grow healthily—Louise Bonne of Jersey, Sheldon and Seckel, for the later ones; and close in with the Winter Nelis, Glout Moreau, Lawrence, and Easter Beurre, for late keeping—all, or either of them, as you may prefer; or, these uncongenial to your soil and position, substitute others which will do better. Let the dwarf have its place also, if it will succeed. Seasonably picked, and properly laid away, a single variety will be in eating one to three weeks of the Summer, and early and late Autumn pears, while the Winter kinds will last for months. Plant well, cultivate thoroughly, manure richly, and prune sparingly your standard trees. Do the same to your dwarfs, with the exception of pruning, in which you may pinch, cut, and scissor to your heart's content and the exhausting of your patience. If the standards succeed at all, they will last you till you become an Octogenarian, or even a score of years beyond it, and then be left as a legacy to your heirs, a lasting and perennial good to each, and all; while your dwarfs may live just as long as they choose to do; and if they die suddenly, you must have a sufficient stock of philosophy on hand not to be hurt by the disappointment.

We shall next proceed to the Cherry, Peach, and other fruits.

#### Varieties of Apples.

To the Editor of the American Agriculturist.

I agree with your remarks on the different varieties of apple trees. I think you have laid the ax at the root of the tree. I will give you my experience, and hope others will add their testimony in order to substantiate the facts that you gave us in the February *Agriculturist*.

Ten years ago, I commenced planting fruit trees, with more experience in sailing a vessel than in fruit growing. I procured a catalogue, ran over the list, and of course selected the best—that is, such as were called the best. I kept them tied to stakes for two or three years after planting, in order to have them stand alone. I cultivated the ground and manured it yearly, washed them, and was as careful of them as a mother is of her in-

fant child, and my wife said, my trees were always the first object I saw when I came home.

My R. I. Greenings and Baldwins have done well. Last Spring, I measured a Greening tree that was 27 inches in circumference—and a Blue Pearmain only 15 inches, in soil equally as good. Unless I expected to live to be as old as Methuselah, I would not give the Blue Pearmain ship room. My Esopus Spitzenbergs have commenced dying. The bark turns black and dies, and the trees soon follow suit. The Newtown Pippin appears to be hardy. Out of 20 Spitzenbergs two only have escaped injury, and one half are dead. I have some 40 varieties of apple trees which were well planted in holes dug 6 ft. in diameter, and 18 inches deep, with a load of loam put in each hole. If I were going to plant a new orchard, I should plant two-thirds Greenings and Baldwins. I have not lost a single Greening or Baldwin tree. The first thing I do after unpacking my trees, is to examine every one for borers. I next cut off all the bruised roots, and then wash the bodies with soapsuds in order to kill the lice.

JOHN PERENE.

Montville, Conn.

#### Old Orchards—Defects in Pruning.

To the Editor of the American Agriculturist.

After plowing the ocean for about 25 years I have bought a farm upon which is an orchard, about 50 years old. Very little care has been taken of it. Large limbs have been sawed off, the stumps rotted, and now there are large rotten holes in them. What can I do with these holes, and when shall I prune so that the limbs will heal over? I have put a lot of hogs in to break up the ground.

HENRY F. GIFFORD.

Falmouth, Mass., April 2, 1858.

#### REMARKS.

Such orchards as the above are very common. Injudicious pruning has prematurely destroyed many of the trees. The first error was in not removing from the young trees all such branches as were likely to interfere with each other, and need after pruning. It is questionable whether large limbs should be cut off, even to give symmetry to the head. Though not approving of the non-pruning system, we may say that the most productive tree we ever saw (which yielded 60 bushels of fruit one year) was never pruned at all. Certainly no one should go into the orchard during March or April and cut away thrifty branches at hap-hazard. Whenever a large branch must be pruned, let it be done neatly and smoothly, and close to the trunk, so that the new wood may close over and heal the wound. There is little hope of reclaiming trees which have once been left with stubs on their side to rot away and let air and water to the heart. Some of the more valuable ones may be protected with canvas bound on or nailed over, to keep out storms. We would plant out a new orchard at the same time, and prune and train to our liking. We have often recommended June and July as the best months for removing large branches, and would then coat the wound with gum shellac dissolved in alcohol.—E.

When an infidel production was submitted—probably by Paine—to Benjamin Franklin, in manuscript, he returned it to the author with a letter from which the following is extracted: "I would advise you not to attempt to unchain the tiger, but to burn this piece before it is seen by any other person. If men are so wicked with religion, what would they be without it?"

We may always joke when we please, if we are always careful to please when we joke.

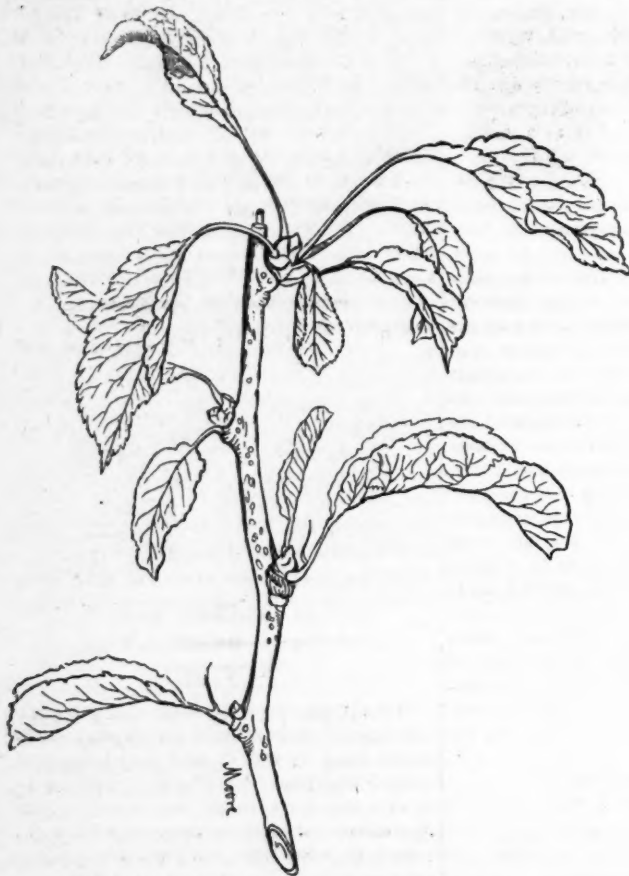


Fig. 1—A branch on which Summer Pinching has been performed without causing the starting of the buds into new shoots



Fig. 2—A branch on which Summer Pinching has been performed so as to cause the last bud to start into a new shoot.

### Suggestions on Pruning....VI.

BY A. O. MOORE, NEW-YORK.

[Continued from page 117.]

It is a very common remark, made too by intelligent men, when the results of a correct system of pruning are shown on a few well managed trees, that this minute attention to root pruning and top pruning, disbudding and pinching, is all very well on a limited scale, it is even admitted that the time and expense have been amply repaid in the product of the trees, but they say "it would never pay in general cultivation on a large scale. In the orchard, the less you have of your dwarfing and scientific pruning, the better. Nature takes care of herself." If closely questioned, the doubter fails to give any satisfactory reason why, if six trees with a certain outlay of time and money, will in ten years yield a certain return, sixty trees with ten times the outlay, will not as easily yield a tenfold income. But he will very knowingly repeat, "that's very well for a few pets, but it won't work with a thousand trees;" and he grows quite merry at the idea of persuading a farmer to stop his Spring plowing to fuss over his trees. "No! give them plenty of good manure when you set out your trees; cultivate them well, and Nature will take care of the pruning, only keep the top from getting too thick."

The innovator, out-talked—but not out-reasoned—plies his "*secateur*" none the less vigorously, resolved to show the old fogies a thing or two. If he is young in his art, he will himself learn something by his experience. Fairly stated rules, all very plain, will not work as they ought, and perhaps the half malicious "I told you so," will issue from under the old slouched hat just seen above the garden fence, as he is contemplating a fine crop of blossoms whitening

the ground, but leaving no fruit upon the branches. But thanks to the perseverance and intelligence of not a few good cultivators, we are in many parts of the country able to show *thousands* of both pear and apple trees, cultivated on a scale sufficiently extensive to refute the assertion that on a large scale, the highest cultivation and most strict attention to the various processes of pruning will not be practicable and profitable. It is not true that the proper attention to pruning occupies much more time than the half performed and tardily applied operations practiced by the farmers generally. A few minutes devoted to each tree while it is young, two or three times each year, is sufficient to establish a good form; when they are older they require much less labor and produce much larger crops than if neglected during the first year of their growth, as is the usual custom.

One of these labor saving operations is *Summer pinching*, which, as its name indicates, is performed in the growing season by breaking off with the thumb and finger the shoots to be disciplined.

The effect of *Winter pruning*, or that performed during the dormant season, is to stimulate into greater activity the buds remaining upon the tree; while the effect of *Summer pinching* is to deplete or debilitate the part thus checked, although in certain instances, the reverse of this would seem to be true. Summer pinching, the effect of which is to *interrupt the flow of sap*, is used to accomplish four objects.

1st. To prevent the suppression or weakening of the buds occupying the lower part of the shoot, and the undue development of the upper buds. Fig. 1 is drawn from a shoot that was pinched in June, at just that point in its development which prevented further growth. The buds below the break have become large and well formed. When

the shoot is allowed to grow undisturbed through the whole season, the lower buds are weak, or become "*blind buds*;" and as the upper buds are cut off at the Winter pruning, none but the half developed lower buds would be left upon the branch. Very often, as in fig. 2, the first bud below the fracture will start to grow the same season, which is not an undesirable result, as this growth does not interfere with the development of the buds below. The pinching for this purpose is generally performed early in June. The leader is generally allowed to remain unpinched for several weeks later.

2nd. To change the rapidly growing shoot into a fruit spur. This tendency is indicated in both the above figures by an increased number of leaves surrounding the buds, occasioned by the sudden concentration of sap upon them. Pinching for this purpose may be done as soon as six or eight leaves are formed, and if the buds start to grow, pinch again.

3d. To check the growth of any over luxuriant shoots. Summer pinching is an indispensable aid in preserving the equilibrium, when the branches on one side of a tree are stronger than on the other, or when in a pyramidal tree, the upper branches are too vigorous, overshadowing and preventing the equal growth of the lower ones. The former must be rigorously disciplined in such cases by Summer pinching, commencing as soon as the fault is discovered, and if they again shoot up too strongly, a second or even a third pinching may be resorted to. If, in a round-headed tree, a rampant shoot takes a perpendicular growth, and threatens to destroy the desired form of the tree, the same treatment must bring the straggler into subjection.

4th. To arrest entirely the development of a shoot, either when it is growing too near to others, or in a wrong direction, as toward the center of



the tree. The pinching-back of such roots is frequently better than their entire removal, for they then have a tendency to form valuable fruit spurs near the center of the tree.

### Town Horticultural Societies.

One of the good things of the day is the establishment of horticultural societies in towns. County and district associations of this sort are well enough in their way, but smaller clubs have some peculiar advantages not possessed by the larger. For instance, it is not enough for one to know what trees and plants are hardy and productive in the State, or even in that part of the State where he lives; he wants to know what are so in his own town. Trees are influenced, in respect to their vigor, growth and fruitfulness, very much by the peculiar climate and soil of the neighborhood. If the fruit-raisers, ornamental tree-planters and gardeners of a town meet together a few times each year, they can gain much useful information from each other. Above all things, call in the older farmers and gardeners, that they may tell the younger what experience has taught them, respecting the capabilities and wants of the soil they have so long tilled.

Such a society should meet not only for discussion of practical subjects, but also for occasional exhibitions of fruits, vegetables and flowers. Let a few persons in any town call a meeting of all persons interested in horticulture, draw up a few simple rules for their guidance, and at once their society lives! Meetings for discussions might be held monthly: and exhibitions might be given at least twice a-year. A show in June would present roses, peonies, snow-balls, spiræas and a variety of other flowers—together with lettuce, peas, asparagus, radishes, early cherries, &c. Another in Autumn would furnish apples, pears, grapes, peaches, garden vegetables in great variety, perpetual roses, dahlias, phloxes, asters, and a multitude of flowers which we cannot enumerate. The time of holding these fairs would vary a little with the seasons, from year to year, but public notice could be given in time for every exhibitor to prepare himself. Of course, judges should be previously appointed to award premiums to successful competitors. We find in the *Rural New Yorker* a copy, in substance, of the By-Laws adopted by a Horticultural Society at Rochester, which, with trifling modifications, will answer for any similar society:

1. The payment of one dollar per annum constitutes a membership, and five dollars a life membership.

2. Competitors for premiums must either be members of the society, or pay one dollar on entering their articles.

3. All articles entered for competition must be grown by the competitor.

4. Exhibitors are requested to label correctly, as far as possible, all variety of fruits, flowers, plants and vegetables; specimens incorrectly named not being entitled to a premium, except at the discretion of the committee.

5. Committees shall have the power of withholding premiums on inferior articles, even if they be the best presented.

6. All fruit, flowers and vegetables, unless reserved by the exhibitor on entry, will be sold at the close of the exhibition for the benefit of the society.

7. Members and exhibitors shall be admitted free to all the exhibitions of the society.

8. The names of exhibitors are not to be attached to the articles, until the committee have made the awards.

It is usual to charge a small fee for admission to exhibition, of from one to two shillings.



Fig. 1.

Fig. 2.

### Form of Quince Trees.

With comparatively few exceptions, the quince trees or bushes are the worst looking shrubbery found in the gardens or orchards all over the country. Fig. 2 above, as bad as it appears, is as well trained, if trained it be called, as a majority of the quince bushes—taken as they run. The two engravings, figs. 1 and 2, we have transferred from Thomas' American Fruit Culturist, to show the striking difference between what is, and what may be. With judicious pruning from the start, there is little trouble in producing the well-formed, beautiful tree, seen in fig. 1; and this, in the end, pays the best in the superior quality and good yield of the fruit. Some persons prefer training two, three, or four stems up from near the ground. We do not like this so well as the single stem, but if it be done, each stem should be carried up four or five feet free from limbs, and all of them so pruned that the branches shall not interlock or interfere with each other, or with the free admission of sunlight.

### Rose Slug (*Selandria Rosa*).

WHALE OIL SOAP.

To the Editor of the American Agriculturist:

We have been plagued beyond endurance, for the last two or three years, with a small worm or caterpillar on our rose bushes. It is about the size of a darning needle, and half an inch long; color, light green. We generally find them on the under side of the leaves, but when feeding, on the upper side. They eat all but the veins. They are numerous enough to destroy all the foliage, which, of course, destroys all the flowers. A black moth or fly precedes them for two or three weeks, which, we suppose, deposits the eggs for them. What shall we do to save the Roses? We have tried the "pound of cure," in applications of lime, plaster, ashes, road dust, tobacco smoke, &c., &c., and now want to get hold of an "ounce of prevention." LINDIE.

Montgomery Co., N. Y., April 9.

### REMARKS.

We are too well acquainted with this pest. The most effective remedy, and preventive as well, we have found to be a solution of Whale Oil Soap, dissolved in the proportion of one pound of soap to seven gallons of water, and applied with a hand syringe, having a sprinkler at the end. Poured from the rose of a watering-pot, the liquid does not reach the insects upon the under-side of the leaves, but they can be dislodged with the syringe. We have never failed to destroy them with two applications, given at intervals of two or three days. Early morning is the best time to use this. The soap can be had at most agricultural and seed stores, at about 50 cts for a pot, containing about one gallon. Where it cannot be obtained, a strong solution of common soft soap and water is a partial substitute. The "black fly" is the author of the mischief, that being the form the slugs take after attaining their full size, and weaving and moulding themselves a "house" under ground. Several broods succeed each other during the season, the last remaining in the chrysalis form during the Winter.

We have not the "secret" of making this soap but it is essentially like common soap, substituting for the ordinary grease, the lees or settlings of whale or lamp-oil casks. This refuse oil can be obtained at any of the stores where lamp-oil is sold. The lees from a barrel or two put with potash, lye from wood ashes, or sal soda, would give enough of this "stinking soap" for using in an ordinary garden. The material for this soap used by the manufacturers, is obtained from clarifiers of fish oil.

### Raspberries at the South.

J. H. A., St. Louis, Mo., writes that good raspberries are rarely seen in that market, the failure being attributed to their warm dry Summers. Our opinion is asked of setting the plants in an orchard where the trees will afford a partial shade. We approve of the plan, having had choice berries from canes which were tied to the branches of peach trees. We have tried a plot of raspberries growing almost entirely in the shade, which have fruited and ripened very finely. These were mostly the Fastolffs, one of the best home fruits, though rather too delicate for carrying far to market.

### Moneywort.

We replied to a subscriber, last month, respecting this plant, that we could not ascertain its botanical name. A little further research has now brought it to light. It is *Lysimachia nummularia*, an evergreen trailing vine of 2 or 3 ft. in length. And we will add that, though perfectly hardy, the roots will not live through the Winter if left in an ordinary garden-vase. They should be taken up in the Fall, and planted in good garden soil in the open ground. It is well to have a patch of it growing all the time in the garden, for setting out here and there, and for giving away to those who will appreciate it. We know of no one having the plant for sale except Messrs. A. Saul & Co., Newburg, N. Y.

### A Garden Fork.

This is a very convenient implement for ladies' use—and for men and boys, too, as for that matter. Our engraving shows the general form. The tines are flat,  $\frac{1}{4}$  to  $\frac{1}{2}$ -inch wide—rather wider towards the points than here shown—and five to six inches in length. The spread of the fork is three to five inches: the handle of wood, six inches long. This implement is admirably adapted to digging around vegetables and flowering plants, to root up weeds and loosen the ground. They usually cost about 50 cents each, at the agricultural stores. This Fork and the "Weeding-Hoe," described and illustrated last Spring (vol. XVI. page 87) are two almost indispensable things in the garden.



### Winter Cherry.

To the Editor of the American Agriculturist

Last year I raised some of the Winter Ground Cherry, mentioned in the *Agriculturist*, seeds of which you are now distributing. I esteem them an excellent fruit—all that they are recommended to be. I made a substitute for honey after the recipe in the February No., of last volume, which was pronounced very good by all who tasted it.

We made some into preserves of the first quality, while others were put away in a measure, and are now fresh and nice. I think it adds much to their value that they can be kept through the Winter. I have plants already growing for early fruiting. They will continue to bear until killed by frost.

I have another fruit which I bought at the N. H. State Fair. It may be the same mentioned on page 22, January No., of the current volume. Mine grew three feet high, with purple colored fruit, one inch or more in diameter, enclosed in a capsule like the Winter cherry. The berries are somewhat tart, and make excellent preserves.

A. H. GRINNELL.

Springfield, Vt., April 13, 1858.

REMARK.—We judge from the specimens sent, that this fruit is a variety of the *Physalis*, which is an extensive family. We have distributed many thousands of small parcels this year, and have still some seed left, though not of our own raising. All parcels sent out marked No. "2" on the back, were not of our own production. We hope they may prove equally good.—Ed.

### The Enfield Market Cabbage.

This variety was so highly commended that we imported what seed we supposed would be called for, but a very great demand soon exhausted it. If this cabbage proves valuable here, we will lay in a large supply for distribution next year. A subscriber in Peru, Ill., recently from England, writes of it as follows:

"I can speak as to the Enfield cabbage, as grown there. It is one of the best in the London Markets. The East Ham and Deptford, are also excellent and perhaps a little earlier, probably caused by a lighter soil. Enfield, or much of it, is a rich clay loam upon a strong clay subsoil. The town is about 10 miles north of London. East Ham is mostly a light sandy loam. The market gardens of Deptford, are on the reclaimed marsh or alluvial level of the River Thames. These cabbages are not what would be called large here; that is, amongst the Germans and Irish. In New-York, they would probably be found superior, but in these Western towns they want a cabbage as big round and almost as hard as a respectable grindstone, no matter as to flavor."

### Chufas or "Earth Almonds."

(*Cyperus esculentus*.)

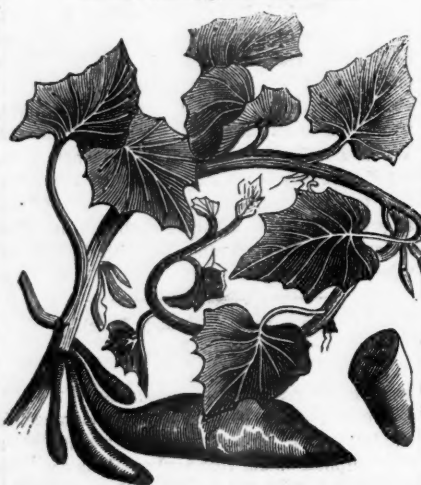
We have many inquiries respecting this plant, to which we are not prepared by personal experience or observation to respond. Mr. I. N. Kramer, of Linn Co., Iowa, writes that he started ten of the Chufas in a hot-bed, and afterwards divided them into 30 hills, planting one-third of a rod of ground. The yield was some 18 quarts of nuts. These he esteems highly as a substitute for chestnuts, of which there is a scarcity in his section of the country.

Another subscriber, on Long-Island, experimented with a few last season and gives us the following results. "I planted the tubers, one in a hill, hills 18 inches apart, in the open ground, about June 1st. They appeared above ground in about a week, with a grass-like top which spread during the season until each hill appeared like a grass mat as large as half a bushel. The tallest spires or stalks were about 2½ feet high, and they were killed down by the first frost. On digging I found an immense number of tubers, in shape like a meadow potato, but only about the size of a common chestnut, or say nearly three-fourths of an inch in

length. In one hill I counted over 200 distinct nuts or tubers.

They are quite palatable, can be eaten raw or cooked, but are better roasted or baked. They are not equal in flavor to chestnuts which they somewhat resemble in taste. The name "Earth Almonds" is a *misnomer*, as they do not resemble almonds in any particular. Their greatest value will probably be as feed for hogs, these animals will of course do their own digging. They appear to contain considerable oil, which has been said to be a tolerable substitute for olive or sweet oil. Many have supposed them identical with the notorious "Nut Grass" (*Cyperus repens*) of the South, but there is a marked distinction. The nut grass grows much taller, sends out numerous creeping roots terminated by a roundish nut much smaller than the chufas. I shall not hesitate to plant them again, with no fear of their being a pest."

C. T.



The Sweet Potato (*Convolvulus batatas*).

The engraving above represents the foliage of this plant, together with some of the tubers. A full chapter on cultivation, preserving seed, &c., was given in our fifteenth volume, page 164, but we add a few general remarks now, for those who may not have that volume. The sweet potato grows best in the Southern part of the Middle States, and further South. In this market they were formerly called "Carolinas," but since their more general cultivation, they are distinguished as "Carolinas," "Delawares," "New Jerseys," &c.

There is little difficulty in growing them as far North as 42° to 44°, by starting the plants in hot-beds. Good tubers have been obtained even in this latitude, by planting out the common market sweet Potato in the open ground, during the first part of May. It is better to start some of the plants in a hot-bed, early in April, and transplant into hills as soon as the soil is dry and warm, and the weather settled. It is now quite common for nurserymen and others to start a lot of the plants and sell them at a moderate price; and when but few are wanted, or where the early hot-bed starting has been neglected, it is safer to purchase them of those who make a business of starting them.

The sweet potato generally does best on a light soil. If not of moderately good quality, add a coat of rotten manure. It is advisable to put into each hill, say half a shovelfull of well-rotted compost, or rotted manure mixed with earth. The hills should be made large, broad at the top, and rounded up well to expose the sides to warmth. They should be 1½ to 2 feet in diameter, and 6 to 12 inches high. Let them be 3 to 3½ feet apart,

where the tubers are planted, to make room for the long vines. If only single sets are planted out, one in a place, the hills may be 2½ to 3 feet apart. Transplant the sets carefully, keeping as much earth upon them as possible. Plant and water much the same as cabbage plants. The after cultivation consists simply in keeping well hoed, and the hills well banked up. The plow may be used at first, but the spreading vines will necessitate the use of the hoe only, for the second and third hoeing.

### Garden Hops.

In "old times,"—that is to say, thirty or forty years ago, when folks lived at home, and took care of themselves, a few hills of hops in some convenient place about the premises, were as indispensable to good housekeeping as the lettuce bed, or cucumber patch. Now-a-days, we are sorry to say, they have got very much out of fashion. "Small beer," for which they were used in the brewing, has got out of use, and "yeast cakes" have walked into the kitchen to take place of honest, old fashioned hop "emptyings" for bread making.

But, to our fancy, garden hops are just as valuable now, as ever, although not in such quantity. Every household ought to have them. If not needed for bread-raising, they are sometimes used medicinally, and the aromatic bitter of the hop is grateful, and refreshing. For an arbor, or to climb the posts of a stoop, porch, verandah, or over a window, they are beautiful. True, were they as scarce, and high in price as the Chinese wistaria, they would be considered "a choice, and appropriate climber." But being only "a hop," are of no account, and vulgar.

Its advantages as a Summer climber, are, first: they spring up from the ground, and in a week, or two, at farthest, mount, and run all over the place. Second; they are profuse in leaf, grateful in odour, and dense in shade. Third; they hold the color of their leaves; seldom harbor noxious insects: and although lacking variety in color, are, in reality, delicate in form, and appearance. Fourth; where the frost strikes them, they can be cut away, exposing the sun, and air to come in where they are needed—the heats of Summer being over—leaving the wood, or trellis work they recently covered, dry, and free from the damp, and decaying influence of the woody climbers and creepers so generally now in use. Fifth; they yield a crop of hops, which are worth something to sell, if not wanted in the house.

Cultivate, then, the hop, either about the porches, or a few hills in the garden. It is worth while to plant them, and after this fashion. Take a few roots from a hill as early in the Spring as you can. Let each root have a starting bud on it. Prepare the future hill by digging a hole full two feet—three is not too much—in diameter, in a good, dry soil. If it be a stiff clay, no matter—the hop will thrive in it. Mix with the earth thrown out a good supply of hay-manure—if you have not that, good barn-yard manure—and throw it back into the hole to within an inch of the surface. Then carefully lay in the roots, three or four of them, letting the buds be a foot apart in a circle, on a flat surface. This done, throw the remaining earth over the roots two to three inches deep; set the pole, and the work is done. Keep free of weeds afterward, and you may take an annual crop in perpetuity, with an occasional shovel of manure forked in during the Fall, or Spring. We can name several costly vines, and creepers which are in great repute as climbers on porches, trellises, and arbors, far below the hop, both in real value, and appearance.



## Flowers for the Lawn.

After what we said to the ladies, last month, about gardening, we presume that their lawns are rid of every thistle and vile weed, leaving nothing to grow except fine, short grass and white clover. A dressing of old manure has been applied and finely raked in among the roots of the grass. The walks are clean, and the edges nicely trimmed. If any one has neglected to cut out a few circular or other fancy beds in the turf, we again urge her to do it now.

If you have room for several of these beds, plant one with *verbenas* alone, arranging the colors as we suggested last month. As there is a great difference in the habits of different sorts, we will mention a few of known excellence. *Scarlets*: Robert Defiance, Brilliant de Vase. *Whites*: Glory of America, Madame Leflo. *Maroon*: Uncle Tom, Cazenovia. *Blue*: Cerulean Orb, Blue Bonnet, Blue Defiance (fragrant,) Rand's Blue. *Purple*: Purpurea Oderatissima (fragrant,) Rachel, Sarah (striped with white,) Hiawatha (reddish purple.) *Pink*: Striped Eclipse, Eva Corinne, Madame Lemonnier (pink and white striped.) Last, but not not least, Imperatrice Elizabeth, (crimson and white striped.)

Another bed you might devote to taller growing plants, such as lantanas, scarlet geraniums, petunias, heliotropes, pyrethrums and fuchsias. These, arranged according to their colors, and tied up to neat stakes, make a brilliant show all Summer. For the best effect, the bed of *verbenas* should be planted nearest the doors and windows of the house, and the lantanas &c., at a little distance.

Another bed may contain perpetual roses. The crimson June roses should not be set on the front lawn, but among the shrubbery, or in the side garden, of which we have before spoken. They bloom only once a year, and after that are unsightly. The perpetuals bloom, more or less all Summer, and by a little care, their foliage can be kept always neat. But to succeed with this class of roses, requires some effort. The bed in which they are to stand must be trenched a foot and a half or two feet deep, and thoroughly manured. If the soil is naturally wet, it must have six inches of cobble-stones at the bottom for draining. The bed being prepared, set out the plants two feet apart, and tie them to neat stakes.

The family of perpetual or ever-blooming roses is composed of several distinct classes, viz: Bourbons, Tea-scented, Bengal or China, Noisettes, and Hybrid Perpetuals, sometimes called Remontants. Only the last named class are perfectly hardy at the North; and for those gardeners who have no means of protecting them in Winter, we hesitate about advising an indiscriminate planting of any but these. At another time we will tell what can be done with the tenderer sorts.

As we are now writing with Northern and Western gardens in view, we will give a list of those hybrid perpetuals which will give general satisfaction:

Auguste Mie; bright rose color.  
Baron Prevost; dark rose, a strong grower, flower in clusters, an old favorite.  
Baron Hallez; crimson purple, globular.  
Caroline de Sansal; bluish, very large, good.  
Edward Jessie; pale red, constant bloomer.  
Giant of the Battles; scarlet crimson, one of the very best, should be in the smallest collection.  
La Reine; rosy lilac, quite large, flowers hang on a long time.  
Lion of the Combats; crimson, fragrant, excellent.  
Marquis Bocella; light pink, always blooming.  
Madam Lafay; cherry red.  
Queen Victoria; pale bluish.  
Prince Albert; rich crimson.

We shall venture to break our resolution to re-

commend *only* the hybrid perpetuals. A few of the tenderer sorts are so beautiful and so much more constantly in bloom, that we would advise to plant them, even if they perish every Winter.

It is not a difficult matter to protect them, however. Bending them down and covering with earth as raspberries, is quite sufficient.

Among Bourbons, we would particularly recommend Hermosa, pink, full, and always in flower, and Souvenir de la Malmaison, pale, large, very double, and exquisitely fragrant, perhaps the finest rose in the world.

Among Chinas, Mrs. Bosanquet, charming blush, perfect form, often called the "wax-rose," and hardly inferior to the Malmaison.

Among Noisettes, Aimee Vibert, dwarf habit, snowy white, double in clusters, a great bloomer; Caroline Marinnesse, white, with a delicate pink shade, very beautiful.

## Culture of the Dahlia.

Among autumnal blooming plants, few, if any, surpass the dahlia. It sends up so stately a stalk, its flowers are so symmetrical in form, so varied and brilliant in color, sporting into every shade except blue, that we wonder not at its popularity. Yet it is not without its defects. It cannot bear excessive heat and dryness, nor too much moisture, it suffers from the ravages of insects, it has no fragrance, and in the eyes of some amateurs, it is a little too regular. Still, it has great merits, and will never lack warm admirers.

It is a native of Mexico, and was first introduced into England in the year 1789. For a season little notice was taken of it. In 1804, it became more popular. But at that time, it was only a single flower, of two colors, purple and scarlet. Within the last twenty five years, florists have taken it in hand, and by long and patient cultivation, have produced the present almost endless variety of double flowers, of nearly every color and shade.

As this is the season for planting the dahlia, we will give some directions for the management of it. In preparing a border for the plants, spade it up a foot and a half or two feet deep, so that the plants may not suffer from dry weather in Summer. Enrich the soil with old manure, and if it is naturally heavy, add to it a good coat of sand, and incorporate the whole thoroughly together. Then set your stakes firmly in the ground where the plants are to stand. If staking is delayed until the plants are set out and growing, the roots will be badly bruised in the operation. For the free-growing sorts, the stakes should be not less than six feet from the ground, and an inch and a half in diameter. A neat way of managing stakes—where one has only a small number of plants—is to get pieces of pine sawed out, of the requisite length and thickness, then planed, and painted green. On the top of each stake, cover a small space with white paint, and on this write the name of each plant. These will last several years.

Dahlias are propagated in several ways; by seed, by cuttings and by division of the roots. Seeds sown in a hot bed, in April, will produce many flowering plants the same year. The new plants will not resemble the parent flowers, but will sport into an endless variety of colors, many of them single, in perfect flowers, and a few perhaps, of superior quality. Cuttings may be obtained by plunging the roots of last year's plants in a gentle hot-bed, and then taking off the young shoots as fast as they appear. Many plants can thus be obtained from a single tuber. The most common way is to propagate by dividing the roots.

Early in May set the old roots in a hot-bed, or

cover them with dirt by the south side of a wall or tight fence, and in a short time the buds will start. Then take them up, and divide with a sharp knife, making sure to leave a bud on each tuber. A tuber without a bud is worthless. Set out the plants at the foot of the stakes, as before directed. As they grow, break off all but one stalk, and tie that carefully to the stake, and continue this tying up throughout the Summer, or the plants will be blown down and destroyed. If insects are troublesome in dry weather, sift air-slacked lime over the plants. If the Summer is very dry, a mulching of fine hay or straw will be useful, more so than frequent waterings.

The above treatment is the best within our knowledge. Yet we confess that sometimes our most carefully nursed plants have yielded only an imperfect show of blossoms, while a few surplus roots set out carelessly by the fence, and tied up to any chance stick, have far outshone the most skillfully and tenderly treated favorites of the parterre—so capricious is this flower, and so variable are our seasons! Still, we are far from recommending careless culture; as a general rule, it would not succeed.

After the plants are cut down by frost in Autumn, take some pleasant day in October, for housing the roots. Cut off the stalks near the ground, leaving sufficient for fastening a label. Dig up the roots carefully, so as not to break them—a strong forked spade is an excellent tool for this work—and let them lie in the sun and wind all day, so as to become thoroughly dry. Before night, carry them into an airy cellar and spread them on shelves. If the cellar is damp, they will be apt to mold, if very dry they will shrivel up. They may be kept safely by storing them on bins of potatoes, partly covering them with the potatoes. This seems to keep them in a proper and uniform state of moisture. Perhaps, a still better way is to lay them in large, shallow boxes, and cover them with sand.

We shall hardly satisfy ourselves, or our inexperienced readers, without giving a short list of desirable dahlias. The following twelve may not be the newest and most fashionable varieties, but they can be relied on as first-rate:

Agnes, pure white, excellent.

Aurora, orange-buff.

Baron Alderson, bright orange, each petal tipped with white; large, full, constant bloomer.

Beauty of the Grove, salmon buff, tipped with purple.

Belle de Paris, pale lilac, edged with purple.

Bob, vivid orange scarlet, one of the best.

Claudia, violet purple, tipped with white.

Grand Duke, bluish lilac, globular, great bloomer.

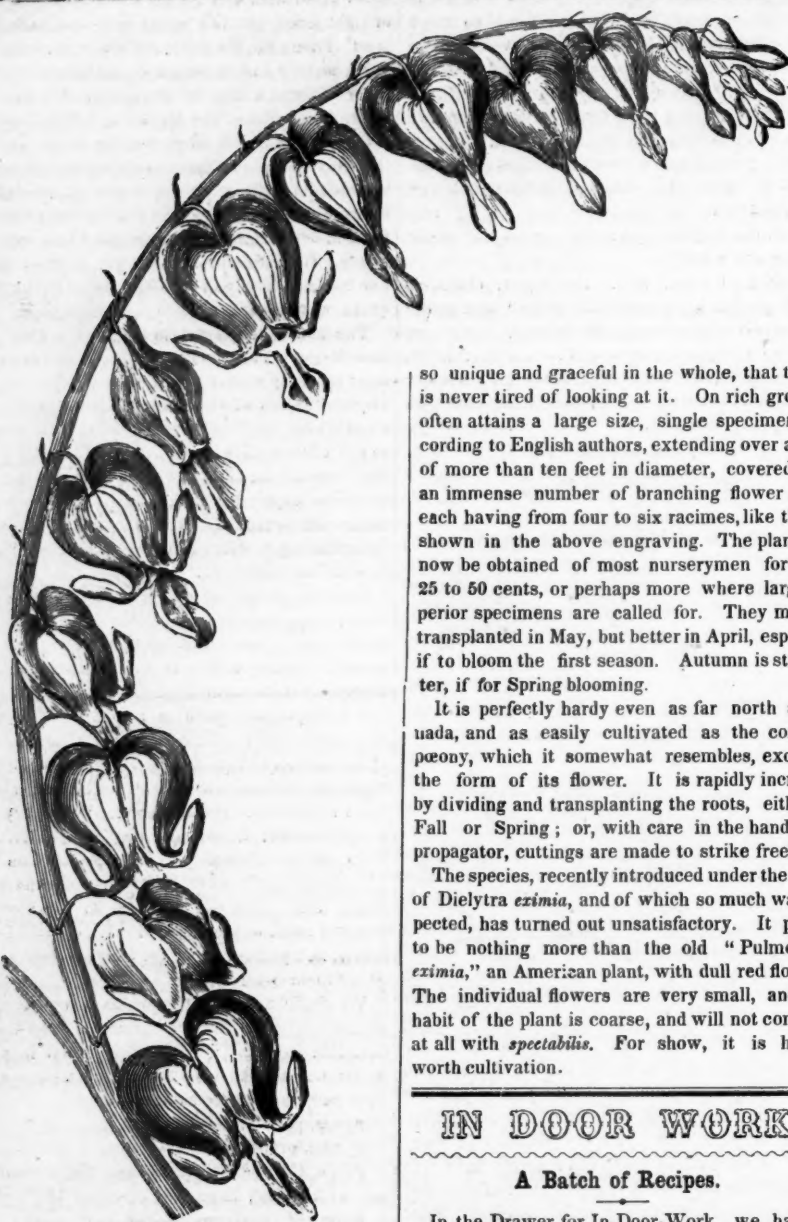
Mrs. Hansard, yellow, tipped with white.

Sir John Franklin, buff, with salmon at the base of each petal.

Sir Robert Whittington, ruby crimson, superb.

Unanimity, scarlet and deep yellow in stripes; first-rate.

GRAPE AT THE NORTH.—R. W. T., Franklin Co., Me., asks if the Isabella grape will succeed as far North as 44° by covering during the Winter: also the price of the Concord grape, &c. The Season is not long enough to ripen the Isabella thoroughly in so high a latitude. The writer of this has nearly ripened them in a neighboring county (Kennebec), in favorable Seasons, but they lacked the flavor of those grown further South. The Concord, which sells at \$1 per vine is a good substitute and will probably do better in Maine. Delaware and Rebecca are also good varieties for the North, ripening earlier than the Isabella, and quite as hardy.

*Dielytra Spectabilis.*

Present above, an illustration of a beautiful plant admirably adapted to adorn the entrance to a house, as well as the door-yard, lawn, and flower garden. One of the prettiest objects we remember to have seen, was two of the *Dielytras*, set one on either side of the dwelling. This beautiful perennial, which was described somewhat at length in our last volume, page 136, will soon begin to develop its brilliant and elegantly formed flowers, it being one of our earliest Spring blooming plants. It may be made to bloom finely during Summer, by cutting down the stems to within a few inches of the ground, immediately after the early Spring flower has faded. This induces the dormant buds around the crown of the root to start into growth, and though the spikes are not so large, the flowers will be as abundant as in Spring.

The *Dielytra* is suited to any soil or location where it can have a fair share of the sun. It shows best when grown solitary, and on turf—and should rarely be planted in large beds or masses—a bed four feet in diameter, with seven plants in it, is as large as would look well. Planted singly, however, around a garden or yard, in any numbers, it is always pleasing—there is something

so unique and graceful in the whole, that the eye is never tired of looking at it. On rich ground it often attains a large size, single specimens, according to English authors, extending over a space of more than ten feet in diameter, covered with an immense number of branching flower stalks, each having from four to six racemes, like the one shown in the above engraving. The plants can now be obtained of most nurserymen for about 25 to 50 cents, or perhaps more where large, superior specimens are called for. They may be transplanted in May, but better in April, especially if to bloom the first season. Autumn is still better, if for Spring blooming.

It is perfectly hardy even as far north as Canada, and as easily cultivated as the common peony, which it somewhat resembles, except in the form of its flower. It is rapidly increased by dividing and transplanting the roots, either in Fall or Spring; or, with care in the hands of a propagator, cuttings are made to strike freely.

The species, recently introduced under the name of *Dielytra eximia*, and of which so much was expected, has turned out unsatisfactory. It proves to be nothing more than the old "*Pulmonaria eximia*," an American plant, with dull red flowers. The individual flowers are very small, and the habit of the plant is coarse, and will not compare at all with *spectabilis*. For show, it is hardly worth cultivation.

## IN DOOR WORK.

### A Batch of Recipes.

In the Drawer for In-Door-Work, we have a large accumulation of Recipes, &c., contributed by our subscribers. These we shall insert from time to time as we have room, without regard to the order of reception, and we hope our lady readers will keep the Drawer full. We print most of these about as received, endorsing or commending only such as we have tried and proved.

[An intelligent lady subscriber on Long-Island, (Mrs. Clementine H.) furnishes for the *Agriculturist*, the first four of the following recipes, each one of which she has tried thoroughly and can recommend as very good.]

#### Nahant Tea Biscuit.

Put in one vessel: 3 teacups of flour, 2 of sweet milk, 3 eggs, a little salt, and beat all together for fifteen minutes. Dip into cups, making them half-full, and bake twenty-five minutes in a quick oven. [This we can commend. The eggs make the biscuits light enough, and save the use of soda and cream of tartar, so objectionable to many persons. Ed.]

#### Election Cake.

Rub together 1 bowl of sugar,  $\frac{1}{2}$  bowl of butter and 1 teaspoonful of soda, and then add  $\frac{1}{2}$  pint of milk and 1 bowl of flour. When mixed well, add 2 nutmegs grated, 1 bowl of currants, and cinnamon or cloves to suit the taste. Bake in loaves.

This cake will keep well for two or three months, or till "after 'lection."

#### Federal Cake.

Warm a pint of milk and stir in one tablespoonful of lard. Add one beaten egg, and flour enough to make a stiff batter, and one cup of yeast. Put in the pan in which it is to be baked, to rise. One hour's baking required. Serve hot—with butter of course.

#### Mountain Cake.

Rub 1 lb. sugar with  $\frac{1}{2}$  lb. butter. Beat together 6 eggs, one teacup of sweet milk, and  $\frac{1}{2}$  teaspoonful of soda. Mingle thoroughly 1 lb. of flour and 1 teaspoonful of cream of tartar. Then stir the whole of the above quickly but thoroughly together, and bake in loaves immediately.

#### Another Mountain Cake.

Mrs. E. H. Hoffman, Wayne Co., Ohio, encloses the following two recipes in a letter to the *Agriculturist*: **MOUNTAIN CAKE.**—Stir to a cream 1 cup butter and 2 cups of white sugar; add the whites of 6 eggs beaten to a stiff froth;  $1\frac{1}{2}$  cups of butter-milk; 3 cups of sifted flour;  $\frac{1}{2}$  teaspoonful of soda; 1 teaspoonful cream of tartar; flavor to taste and bake in a moderate oven. It looks nice cut in slices. **DOMESTIC CAKE.**—To  $\frac{1}{2}$  lb. sugar and  $\frac{1}{2}$  lb. butter beaten to a cream, add 1 lb. flour and half a nutmeg grated; work to a smooth paste; roll to half an inch in thickness, and cut into square or round cakes; bake in a quick oven.

#### Corn Starch, Delicate Cake.

This we have tried 'at home' and like it. A 'friend' gives the following 'prescription': Beat 1 cup butter, with 2 cups sugar, to a cream; add 1 cup sweet milk in which is dissolved a teaspoonful of soda; beat the whites of 7 eggs to a stiff froth and stir lightly with the above. Mix thoroughly together 1 cup of corn starch, 2 cups of flour and 2 teaspoonfuls of cream of tartar. Then mingle the whole of the ingredients, beating quickly but thoroughly, and flavoring with essence of lemon or rose-water. Bake immediately in a deep dish.

#### Poor Man's Cake.

"A Cottage Girl," Dauphin Co., Pa., prescribes: "Put into 3 lbs. of common bread dough  $\frac{1}{2}$  lb. butter and  $\frac{1}{2}$  lb. sugar. Then mix in 1 lb. currants and 1 lb. 'candied peel.'"

#### Loaf Cake.

A Litchfield Co., Ct., correspondent offers the following: With 3 cups of milk, 1 cup of sugar and  $\frac{1}{2}$  cup of yeast, make a thick batter and let it stand over night. In the morning add 2 cups sugar,  $1\frac{1}{2}$  cups butter, 1 egg, and spice to liking.

#### Pork Cake.

Mrs. M. C. M., Stoughton, Mass., gives the following recipe:  $\frac{1}{2}$  lb. pork chopped fine;  $\frac{1}{2}$  lb. raisins; 1 cup molasses;  $\frac{1}{2}$  cup of sugar;  $\frac{1}{2}$  cup of boiling water; 1 teaspoonful cream of tartar;  $\frac{1}{2}$  teaspoonful soda;  $\frac{1}{2}$  teaspoonful each of cloves, cinnamon and nutmeg. [We suppose some flour is needed to thicken it, and even then we should suppose the mixture a pretty strong one for a weak stomach, or for any other—though, perhaps, no more so than the majority of "Suet Puddings." Ed.]

#### Indian Griddle Cakes.

Contributed for the *Agriculturist* by a subscriber at Mansfield Center, Ct. Mix 1 quart of new milk, 3 tablespoonfuls of cream, 3 beaten eggs, 1 tablespoonful of salt, and Indian meal enough to make a stiff batter; beat the whole well together and cook on a griddle the same as other griddle cakes, but with not quite so quick a heat.

#### Muffins.

S. L. Ward, Bristol Co., Mass., gives us the following: 1 cup sugar beaten with 3 eggs; a



piece of butter the size of an egg; 3 cups flour, and teaspoonful of soda; 2 teaspoonfuls one of cream of tartar mixed with the flour; 1 cup of sweet milk. Bake in muffin rings, in a quick oven.

#### Bread Pudding.

Contributed for the *Agriculturist* by a subscriber in Tolland Co., Ct. In the evening take a loaf of bread baked on the morning of the same day—one made with a pint of milk is about the right size—and crumble it very fine, especially the crust. Pour on new milk enough to barely cover the crumbled bread, and let it soak over night. The next morning mash it very fine; add 8 beaten eggs, a large pint bowl of raisins, about a tablespoonful of salt, and put into a 4-quart pan for baking with milk enough to nearly fill the pan. Bake 2 to 3 hours, according to the heat of the oven. To be eaten with warm, sweet sauce. [We think any loaf of bread, even two or three days old, if still sweet, might be used. Ed.]

#### Ready Made Yeast.

A housekeeper in Concord, N. H., of 20 years experience, recommends the following to the readers of the *Agriculturist*: Boil a handful of hops in 2 quarts of water and add 4 large potatoes boiled, mashed and strained. Scald 6 tablespoonfuls of flour in the liquid, adding 1 cup of sugar and 1 cup of salt. When cold add yeast to ferment it, thinning the liquid to 2½ quarts. This put in well-corked bottles will keep six weeks in the hottest weather. Use half a teacupful for each loaf of bread.

#### Peppering Bacon.

Hervey Caldwell, Rush Co., Ind., recommends putting a good coat of ground black-pepper upon Bacon (hams) after it is smoked and ready to be packed away in Spring. He recommends 1 lb. pepper to 100 lbs. bacon. This he says will keep away skippers, and other vermin.

#### Cucumber Pickles.

Mrs. Cynthia Stanley, of Hillsdale, Mich., sends the following. It is taking a good deal of trouble for a dozen cucumbers, but those who eat this article, pickled or unpickled (we do not) may consider the pickles obtained worth the trouble: "Take 12 cucumbers, full grown, but not ripe; pare, quarter, scrape out the seeds, and sprinkle on a little salt, and let them stand five or six hours. Dissolve 1½ lbs. of sugar in 2 quarts of vinegar, heating and straining it. Immerse in the liquid a bag containing ½ ounce each of cloves and cinnamon. Put the cucumbers, rinsed from the salt, into the liquid; set over a slow fire for twenty minutes; then pour the whole into a crock and cover tightly for twenty-four hours. At the end of this time pour off the liquor, scald, and return it, and repeat the process at the end of another 24 hours. Then cover tightly and set aside in a cool place, and they will keep for a long time.

#### Soap for Hard Times.

S. S. Moody, North Headly, Mass., recommends the following: Cut 1½ lbs. of common bar soap into thin pieces, and boil fifteen minutes in a pail of soft water with 1 lb. of sal soda. Pour the whole into a barrel, and fill two-thirds full with water. [This will make a solution of hard soap, but not a genuine soft soap. The latter can only be made with potash. The distinction between hard soap and soft soap is, that the alkali in the former is soda, and in the latter, potash.—Ed.]

#### Grease Spots.

Susanne, of Brooklyn, writes: "Tell the readers of the *Agriculturist* that many of these eyesores may be removed for a sixpence invested in French chalk." She gives, as an example, that her 4-year-old carried a nice edition of "Cowper" into the kitchen and dabbed it into the butter plate.

She scraped some of the French chalk over the spots of grease, and in an hour afterward brushed off the powder and put on a fresh dose, leaving it three or four hours, when Cowper was himself again. "The same application operates equally well upon greased clothing, though, sometimes, two or three applications may be needed. The French chalk (clay) can be obtained at any drug-store."

#### Convenient Lye Hopper.

S. W. R., of Harford Co., Md., sends to the *Agriculturist* a description of a convenient leaching tub, somewhat on the plan of the filtering apparatus, fig. 1, page 92, March No: "Take a common meat or fish barrel (a mackerel barrel is best,) and put brick, stone, or wooden blocks in the bottom, say 6 or 8 inches high; upon these put a false bottom of rough boards well filled with large holes, or lay in two or three pieces with openings between. The upper head may be used, by boring holes in it and notching the edge. Lay in some straw, and then put in the ashes, punching them down well with the end of a spade, to prevent the water from washing out the ashes. The water poured over the ashes will slowly settle through, and may be drawn out by means of a spigot or tap at the bottom. The opening in the bottom answers as a secluded reservoir, where the lye is prevented from being acted upon and injured by the carbonic acid of the air, and a constant supply of fresh lye may be kept on hand for use as desired. No more than is wanted need be drawn off at any time.

#### Coloring, Blue, Yellow, and Green.

Mrs. E. Gilbert, Lenawee Co., Mich., offers the following to the lady readers of the *Agriculturist*. We are not able to speak of their value as compared with other modes. Were they not from good authority we should "guess" (not assert) that the salt would not be a sufficient mordant to render the colors permanent.

"To Color Blue.—Dissolve 1 ounce Oxalic acid in half a pail of rain water. Put 1 ounce Prussian blue in an earthen bowl, and wet with some of the acid water. Stir till dissolved and then put the whole in the acid water. This is enough for 2 lbs. of cotton cloth. Dip the cloth into the water, wring out, and dry in the shade. Then rinse in a pail of rain water, in which a single handful of salt has been dissolved. To color 2 lbs. of Cotton Yellow—Dissolve 2 ounces sugar of lead in a pailful of rain water. Scald the cotton goods in this for 5 minutes. Take out the cloth, and then dissolve in the same liquid 1 ounce of Bi-chromate of Potash. When all is dissolved scald the cloth again for a few minutes, stirring it about all the while to keep it from spotting. Dry, and then rinse in salt water as for the blue color. To Color Green—First color yellow as above (without rinsing in salt!) and then dip in the Prussian blue dye, finishing with the salt water rinsing. These operations must be done in brass vessels. The above modes of coloring are much used for rag carpets."

#### Preserving Cans, and a Hint to Tinmen.

A fourth year's experience with the air-tight, screw-top, or self-sealing cans for preserving most kinds of fruits, has convinced us beyond a doubt that this mode of putting up fruit is not only more healthful, but in the end cheaper than the old fashioned way of "preserving" in sugar. When the fruit season comes round we shall advise our readers to put up their cherries, strawberries, raspberries, and by all means the peaches in air-tight cans. We have these fruits now as fresh and good as when they were picked last season. But large numbers of our subscribers

wrote last year that they could not get the cans, without paying double or treble the first cost, for transportation of such bulky articles. The main object of this note is to say that a better way for those living remote from large towns where these cans are made, is to secure a quantity of the covers with the screw caps attached, and have the main body of the can, that is the sides and bottom made by a tinman in your immediate vicinity. Or what would be better, perhaps, suggest to your tinman to get a gross or two of the caps, more or less, and prepare the cans for sale. This idea was suggested by seeing a quantity of the covers and caps being packed for a distant Western town. They are made on a large scale by machinery, and sold at about \$1 25 per dozen, the same cover answering for a one quart or a two quart can. A dollar per dozen or at most \$1 12, would probably cover the cost of making the body of the quart cans, and the transportation of the caps. This would bring them below the price (\$2 50 per dozen), that they are retailed for at the head quarters. We are using some quart cans the fourth year, which reduces the cost to 5 cents a year, and this amount is saved in the less sugar required, to say nothing of the more healthful and more delicious sweet-meats thus secured.

#### OUR BASKET

Into which are thrown all sorts of paragraphs—such as NOTES and REPLIES to CORRESPONDENTS, with Useful or Interesting Extracts from their Letters, together with Gleanings of various kinds from various sources.

To CORRESPONDENTS.—We have examined many hundreds of 'laid over letters' the past month, answering them privately, or in the items below—some single paragraphs apply to a dozen or more letters. The remaining letters now on hand will be attended to next month, and as many new comers as possible.

Hot-Beds—Muck, Leaves.—T. Allen, Athens Co., O. Where muck cannot be had, get forest leaves, or the surface soil from the woods, scrapings from ponds, or turf and loam from the road-side to mix with manures. These are improved by being previously strewn over the stables to absorb the liquids. In making hot-beds with forest leaves, put them in dry. The moisture from the surrounding earth will be sufficient.

Trees—Deep Planting and Banking.—In reply to California subscriber and others, we advise to set trees as nearly as may be to the same depth that they stood in the nursery. The great aim in transplanting all trees should be, to preserve the original condition of depth, extent of root, &c. With regard to banking up, when a tree is first set it is well to add a good body of earth to keep it upright; but the surplus earth should be removed as soon as the ground has settled firmly.

Dwarfing Trees—How to do it.—H. Sherwood Niagara Co., N. Y. We can dwarf the natural stocks of apple, pear, cherry, &c., by heading back. They are usually dwarfed, however, by working on less vigorous stocks, such as the Paradise or Doucain, for the apple on the Quince, for pear; and on the Mahaleb and Morello for the cherry. These are usually budded low, or nearly in the ground, with the variety of fruit to form the top.

Pear Trees—What to Plant.—A. G., of Washington Co., N. Y., asks the above question, rightly proposing to confine himself to a very few kinds. He does not, however, state whether he wishes Summer, Fall or Winter fruit. For two trees of each we would name for Summer, one each of Madeleine and Beurre Giffard for early Autumn, Bartlett and Fondante d'Automne; for late Autumn, Flemish Beauty and Louise Bonne de Jersey; for Winter, Lawrence and Winter Nellis. We would choose standards rather than dwarfs, though dwarfs of some varieties, if carefully nursed, do well for limited areas, and for fruiting soonest after planting.

Ashes on Peach Trees.—J. Webster, of Philadelphia, states that finding his favorite peach trees decaying, he dug around the roots with a trowel and discovered a number of white grubs. These he killed, and scattering among the roots about two quarts of strong wood ashes, he covered them with earth again, and spread on the surface two quarts of slaked lime. The grubs disappeared and the trees recovered, flourished and bore fruit for several years, until they were removed on another account. It is barely possible that the white grubs were ones



cause of the injury at first; the ashes and lime doubtless benefitted the soil aside from destroying the grubs.

**Buds from Nursery Trees.**—A subscriber on the Pacific coast, inquires whether buds taken from trees or cuttings received from New York or the Atlantic States, are fit to use for budding. If obtained from reliable sources, the buds may be used for the desired purpose. Experienced persons can usually judge of the genuineness from the appearance of the wood, and especially from the leaves after they are well out.

**Curculio Remedy.**—Mrs. E., of Calhoun Co., Mich., writes that she gets full crops of plums annually, while those of her neighbors are greatly diminished by the curculio. As long as the trees are in bloom, and for a week afterwards, she every morning, while dew is on, takes a pan of leached ashes and with the hand throws them through the foliage, taking care that some shall fall upon each flower.

**White Pine from Seed.**—S. Demsey, Essex Co., Mass. Collect the seed when ripe, and sow in the Spring on light, sandy loam, covering with very little soil. The bed must be kept moderately moist, and shaded from the hot sun.

**American Weeping Willow.**—Benj. Kerr, Lancaster Co., Pa., and others. This willow we have seen in the nurseries of Parsons & Co. See advertisement in page 73, March No. It is also for sale by other nurserymen, we suppose. There is another variety called the *Kilmarnock*, which is quite equal, if not superior to the American. These two are sold at 50 cents to \$1.00 each, according to size, quality, &c.

**Sowing Carrots.**—A. D., Ulster Co., N. Y. Early sowing is preferable, say by the first of May. Guano and Plaster will operate well if mixed thoroughly with the soil so as not to kill the tender plants by contact. Fine bone-dust, or better, bone sawings, deeply mixed with the soil in the drills we have found a most excellent fertilizer for carrots, beets and parsneps. Last year we raised parsneps large enough and long enough for respectable bed posts, by trenching deeply and digging bone-sawings into the rows before putting in the seed.

**Carrots vs Parsneps for Stock.**—"Subscriber," Sidney Plains, N. Y. We think the long orange carrot is preferable to the Belgian, and better for cattle than parsneps. It is easier to raise and dig 100 bushels of carrots than so many parsneps. Smooth carrots, two feet long, are hard enough to get out of the ground, but "sprangly" parsneps, 24 or 3 feet long, are only excelled in digging by *Chinese Yams* (*Dioscoreas*.)

**Mandrake, or May Apple** (*podophyllum peltatum*).—"Wisconsin" asks if these may not be improved by cultivation. We are not aware that the attempt has been made, and question whether anything of much value can be made of them. Some of our readers may have experimented with them. If so please report the results.

**New Rochelle Blackberry.**—J. J. B., Richmond, Va. This blackberry will doubtless succeed in your locality. We think they are already growing well in your vicinity, though we do not now remember who has them thereabouts.

**"Squaw Corn."**—J. S. Pulsifer, Schuylkill Co., Pa. The sample of corn you sent us, varying in color from white to mixed, red and blue, is probably a cross of the Tuscarora and some other kind. Single varieties seldom sport into divers colors when kept entirely by themselves.

**Mixing of Corn.**—"One of the Boys" at Independence, Iowa, inquires, if corn, planted at different periods, side by side, will mix. It will to some extent, although slightly if one is an early variety, and planted sometime before a later kind. So long as the bloom, of the late suckers even, falls upon the opening silk of another variety, the two will mix. Better plant the kinds forty rods or more apart, to preserve them pure.

**King Philip Corn.**—Horner A. Kidd, of Walden, Orange Co., N. Y., writes, that June 2nd, last year, he planted 1 acre with seed obtained of us, on light, sandy soil, rows 24 feet apart. It grew luxuriantly, was well plowed, and hoed twice, and was fit for roasting long before other varieties in the same neighborhood. When green it was sweet and luscious. It produced at the rate of 100 bushels of shelled corn per acre." At the date of his letter, Feb. 2d, Mr. K. had some seed to part with, and may yet have.

**Tobacco Culture.**—P. L. Buchanan, and other inquirers, will find a full chapter on tobacco growing, on page 54 of our last volume (March No., 1857). We cannot repeat the chapter so soon again, and we have little to add to that article, which was designed to be as complete as our space would admit. There are many articles in volume XVI., which, of course, cannot be given in the

present one, and it would, doubtless, be worth while for new subscribers to obtain it. The volume, in numbers, is sent, post-paid, for \$1.12; or furnished bound for \$1.50. The bound volumes are rather large to go by mail, but may be so sent by pre-paying 42 cents postage.

**Cucumber Bug Preventive.**—Mrs. I. Hunter, Knox Co., Ill., says that her cucumbers have never been troubled with bugs of any kind, since she has tried placing a tomato plant in the centre of each hill, when putting in the seed. The tomato plant is removed when the cucumber vines are too large for the bugs.

**Eradicating Briars.**—Hon. Wm. W. Valk, Somerset County, Md. Your vivid description of slovenly, careless farming is too true of many places all over the country. Perhaps the Lantern of Diogenes, may yet shine into some of these dark corners.—We know of no better implements to eradicate the thick growth of briars infesting your ground, than the plow, harrow or cultivator, and hoe. The roots of any plant will soon die if kept from breathing by allowing no leaf to exist above the surface. A few years since, a Western friend constructed a heavy small harrow, with long strong teeth pointing forward. A pair of handles on the rear end served to lift the implement up with, when clogged. The ground was first plowed deeply and then harrowed and cross-harrowed several times. By this means the briar roots were gathered and dropped in heaps wherever the clogged harrow was lifted, and they were then carted off. A couple of hoed crops following, subdued the pests.

**Caraway.**—Miss Lucy A. Watson, Orange Co., Vt., writes: Prepare and sow a small bed, and keep down the weeds for the first year. Then transplant to a large bed, and keep from weeds the second year, after which it will propagate and take care of itself, furnishing an annual supply. We have tried this plan, except the transplanting, on a small border of the garden. The only trouble was to keep it from spreading beyond due bounds.

**Ferrets.**—J. B. W., of Harford Co., Md., inquires where these can be bought. We do not know. Any one having them to sell would do well to advertise them.

**Gophers or Ground Squirrels.**—H. Platt, Whiteside Co., Ind. These animals on the prairies, like the chipmunks in woody regions, are often great pests, and various remedies have been proposed. One is to drive steam into their holes by means of a portable hand boiler, with a long nozzle or hose. This scalds, or drives them out, when they are caught by dogs. They may be poisoned with arsenic or strychnine mixed with meal and placed near their haunts. "It is said," that castor beans planted among vegetables will keep them at a distance (doubtful). Cats with half-grown kittens to provide for, make no small havoc among the gophers.

**Potato Parings for Seed.**—E. Remington Lycoming Co., Pa., writes that he experimented with potatoes last season, planting whole ones, halves, quarters and skins only. He cut the last as thin as possible, taking care however, not to wound the seed bud. They were dried by the stove until many of them were like chips, planted apart by himself, and the yield was fully equal to any of the others. This may have succeeded well in such a season as the last, but is not generally advisable. The more nourishment the young plant gets from the old tuber, the better start it will get, and it will do better in nine times out of ten, than if having only the thin paring.

**Poultry and Cows in Minnesota.**—M. Marks, of Rice Co., says, among other things: "... Our 23 hens laid 279 dozen eggs from the first of March 1857, to the first of Jan. 1858. They are still laying 34 dozen per week.... From three cows and one 2-year old heifer, we made 800 lbs. of butter from the fifth of March 1857, to the first of January 1858. We sold 700 lbs at 32 cents per lb., and raised 5 calves worth \$40."

**Melons, &c., in Kansas.**—Mr. C. E. Blood, writing from Manhattan, Kansas Ter., says: I have seen no country that could excel this in the production of melons, squashes, pumpkins, &c. They all have a peculiar sweetness and richness of flavor.

**Nebraska Agriculture.**—J. S. M. We shall be glad to get condensed practical information from your Territory and all others. Thanks for your kind words of encouragement.

**Improved Stock.**—An advertisement in this paper announces some good stock for sale, by the Brothers Haines, of which a catalogue may be obtained as announced.

**Twin Heifers, Free Martins.**—H. G. Peach, Lake Co., Ind. Twinned heifers will breed as well as those dropped singly. The same may said of twinned males. "It is only the 'Free martin'—that is, a heifer twinned with a bull—that will not breed well."

**Patent Office Seeds.**—Jno. F. Driscoll, Provi-

dence, R. I., Secretary to the R. I. Hort. Society, says: "I had some seeds from the Patent Office, labeled as flower seeds, which turned out Red-top Grass and Mullein, which were a very great acquisition to my annuals."

**Sawdust and U. Inc.**—S. M., Luzerne County, Pa. If you can get sawdust delivered at the stable for 1 cent per bushel, or even double or treble that price, by all means get and use it freely to absorb liquids in manures, and also as a mulch around trees, berry plants, &c. Some striking results from the application as a fertilizer of sawdust soaked in urine have been recently published in Great Britain. There is no doubt that sawdust saturated with urine, house-slops, or liquid manure is an excellent manure.

**Bombers' Manure.**—J. H. Foster, jr. (*junior Dispatch* Ed.) Tioga Co., Pa. This is referred to in last volume, page 82. We do not consider the subject worth the room to discuss it in.

**Farmers' Hand Mill.**—W. B. Thompson, Meigs Co., O. The above mill you inquire after is still on sale, by Fowler & Wells, but they prefer not sending them out, unless the purchaser examines the machine, and is satisfied with it. It does not give the satisfaction which was expected.

**Value of a Paper.—A Problem in Arithmetic.**—J. L. J., of Montgomery Co., Pa., relates an instance where the knowledge obtained from a single copy of a paper saved a valuable animal. We mention this as one of hundreds of such instances that from time to time come to our knowledge. Reader, would you now really part with a title of all the information you obtained from even the poorest paper you ever subscribed for, for double the cost? Suppose you cypher it up.

**Davenport City, Iowa.**—Friend Hall will please accept our thanks for the map of Davenport—it calls vividly to mind the beautiful prospect we looked upon last Summer, as we were on the bridge crossing the "Father of Waters"—also for the sundry notes which are laid away for future use.

**Schizanthus** is pronounced as if written Ski-zanthus. The letters *ch* are pronounced like *k*, in *Lys-i-mach-i-a*, *Esch-scholt-z-i-a*, *Ar-is-ti-to-ch-i-a*, &c. Thanks to W. F. Bassett, Franklin Co., Mass., for his suggestions. The "Maple" topic some other time.

**Three Wheels to a Wagon.**—David Link Floyd Co., Va., writes: "I believe the *Agriculturist* indispensable to every systematic, well-regulated farm. I cannot say enough in commendation—am getting up a club. I would as soon do without one wheel to my wagon, as without the *Agriculturist*. It was certainly worth \$20 to me last season."—That will do.

### An Editor Feeling Very Badly.

A certain journal published near Philadelphia, is in a very bad way again—or rather its disease, which is constitutional, has broken out in a new spot. There are few Journals which it has not at some time, in a very military tone, bid begone from its august presence, or else salved them over with overweening praise *ad nauseum*. But Major Frens' last gun was a regular Paixhan which must have been loaded with *grape*. Not content with detailed denunciation, he now tells the whole "bamboozled country press" they are a set of ninnies, all of them having been, to quote his own words, "gulled by a certain artful New-York city agricultural monthly." From almost any other source we should have esteemed this quite complimentary, for we have spent most of our days in the country, and from our boyhood up to this hour we have had quite an admiration for any "New-York Chap," smart enough to get round us country fellows, especially when we had them on our own ground. But the compliment is of no account, since the "Country Press" in general, and that of Pennsylvania and New-Jersey in particular, have heard the Major's command, "eyes right," so often, that they leave him where the Shepherd boy, accustomed to cry wolf so often in fun, was left when the wolf *did* come. The Major goes on to condemn our advertisements as "outré" because they have been set up so as to accomplish the aim of all advertisements, viz: attract attention. We wonder how he had the conscience to say any one of our articles was ever re-written from another journal and printed as original. We pay over \$3,000 a year for editorial aid, and have no occasion for this kind of plagiarism which the Major seems to himself understand, as he intimates further on that he feels as if he had a "rope around his neck," when he takes the New-York monthly in hand, since it is *copyrighted*, lest his propensity to take without credit should subject him to "prosecution."

Pray don't be alarmed Major; its only militia training day; the enemy are not near; sorry to see you run (drop exchange). We only expect to "prosecute" one Yankee and one Western editor, and not them if they



stop making up a whole broad-side of editorial out of the *Agriculturist*, without even so much as mentioning its existence. No, No, Major, don't be frightened at your own shadow. We are in a very patronizing mood just now, and as your journal is usually so devoid of good agricultural editorials, we by "special enactment" grant you a permit to copy from the *Agriculturist* into your paper one leading editorial every week, without giving a word of credit, since your ostensible cause of complaint is our "copy-right."

Why feel so bad Major, because we put a small picket fence (copyright) around our flower garden that costs so much care and anxiety, and money, just to keep marauders out. Come right round and we'll open the gate ourselves, and set out a table under an arbor, and bring out "coffee for two"—if you'll leave your "pistols" and sword at home. Come right round Major, we want to whisper in your ear a little about our private business matters which you don't seem to understand. What did make you think we got all our advertising done for little or nothing? Why that was a great mistake. You see we don't scarcely advertise at all, ourselves, Major. We sometimes for amusement draw up an odd sort of an advertisement just to see how it will look in the Times or Tribune, and sometimes a clerk gets up one, and one of the funniest ones was sent in by a subscriber. Well, it gets in one paper, and then along comes a dozen agents of the "country papers," (not our agents,) and they offer to insert that advertisement in ever so many papers at ever so low a price. There is one of these agents who is a real gentleman, and he has such a winning way that he generally conquers, and when he presents his "lowest terms" for 500 or 1,000 papers, we come down at once, and hand him over a few thousand dollars and say go ahead. So, Major, instead of advertising free, we have paid over \$16,000 to "country papers" for advertising alone in a year or two past, though we have not attended to the business personally, and know not but all the publishers in the country are abundantly satisfied with the deeds of their own agent here. He always shows us their bill for all we agreed to pay him. But advertising in any way pays, Major. Just try it. Come round on next mailing day and see the *fun after fun* of *Agriculturists* that we send to the Post Office every month. And then there is such a pleasure in these things, Major. Every number contains so many good suggestions from our worthy associates and correspondents; and there are so many engravings to both please and instruct the readers. Why, how could you call them "useless things," as you did the other day? You were not thinking of your own monotonous pages were you? There, there, now, put up that pistol—we meant monetary pages, or something of that kind.

Well, Major, can't we make up now? You once thought much of us, and we never did you wrong but once, and that we are very sorry for on your account, as it keeps you feeling so badly, though it was a good thing for us, that we went right into your domain and bought out the Penn. Farm Journal. We would be more sorry, but some how there are more than ten thousand Pennsylvania Farmers that seem to like the *Agriculturist* well enough to keep sending their money for it. But you see Major, they don't know so well as you do what is best for themselves, or they would heed your advice and leave all foreign papers, no matter how good and cheap and come and pay you two dollars for your home sheet, which contains so many interesting advertisements, all set in orthodox style (not "outré"). Pray don't feel bad again, Major, and write another such article as you did. Your dinner must have set very badly, or did you sleep poorly? Never mind, Major, never mind about those few thousand farmers that will persist in coming to New-York, for an "Agricultural Monthly." Let them go, and talk to the half a million who are not yet so unwise. Good morning, Major, call round again.

#### To Farmers, Mechanics, and others, IN NEW ENGLAND AND NEW YORK.

[We commend the following to the attention of our readers. It is truly a benevolent work to gather up and redeem, or save to society the hundreds of boys who would, unaided and uncared for, only grow up to be a pest.—Ed.]

It is well known to the public, that numbers of poor, homeless boys come to our office, or are brought in by the visitors, who want work and a home. Their ages range from 15 to 18. They are often strong, healthy lads, able to work well on farms or at trades.

Of their characters and past lives we generally know but little. We only know that they are unfortunate, and exposed in the city to all kinds of temptation. Here, they will soon be ruined. In honest work in the country they may become useful men. We desire to put it before the conscientious and religious consideration of our farmers and mechanics, especially in New England and New

York, whether it is not their duty to aid us in the effort to save, for time and eternity, these poor lads. These are the Heathen at their own doors. Our experience shows what vast improvement the efforts of a patient Christian family may produce on the boys and girls of this class. If the experiment fail in any particular case, the employer can only feel that he was trying to serve his Master, and that the loss is no loss to his own soul.

We desire to send these lads to New England and New York, because the expense is so great in getting them to the West, though kind homes are always open there. We propose to pay the expenses of the journey, on condition that they be refunded if the boy remains. Each applicant must enclose recommendations from his Pastor, or the Magistrate of the town, and, if possible, references to responsible persons in New York. He should also give us his town, county and State and the nearest and cheapest route thither.

Address "J. Macy, Assistant Secretary, 11 Clinton Hall, Astor Place, Children's Aid Society, New York."

Who among our farmers and mechanics will lend a hand in this effort for the sinful and unfortunate?

C. L. BAACE, Secretary.

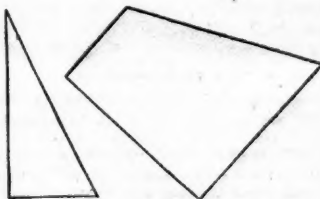
### Boys' and Girls' Own Columns.

#### Answers to Problems.

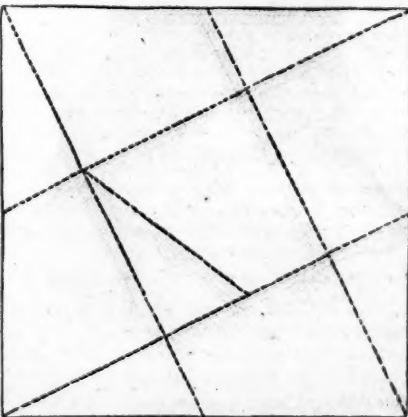
These have come in like a torrent, and we must "suspend" New Problems for a month, to make room for some other matter which may interest our young friends as much as the problems. You may look for some new ones in the next number. We give below all the correct answers received up to April 18th.

Prob 25, 26—Chas. Young, Henry Co, Iowa, and "Vermont Boy," sent answers to these in March, but they did not get here until a long time after.

Prob. 27—To arrange 10 pieces like the following (5 of each kind) in a square.



There are several modes of doing this, of which the following is the one adopted by most of those sending us drawings.



Answered thus: by Wm. Creighton, Westchester Co N.Y.; Elihu Cox, Randolph Co, Ind.; George Marston, Albany, N.Y.; Jane Stebbins, Wilbraham, Mass.; Frank and Eugene, Huron Co, O.; Calvin H. Brandon, Carlisle, Pa.; Harrison Flora, Stark Co, O.; George W. Van Winkle, Hudson, N.Y.; J. M. Dayton, Hartford Co, Ct.; Susanne, King's Co, N.Y.; George H. Clark, Orange Co, N.Y.; Joseph Mellon, Chester Co, Pa.; D. Webster Spicer, Jefferson Co, N.Y.; A. C. Whitnack, Somerset Co, N.J.; George A. Young, New Bedford, Mass.; George A. Kenadine, Windham Co, Ct.; David B. Stewart, Washington Co, Pa.; Newell H. Haynes, Stoneham, Mass.; Henry J. Bacon, Middlesex Co, Ct.; C. C. Ingleside, Westchester Co, N.Y. (with mathematical demonstration); Jas. Huffman, Hunterdon Co, N.J.; M. E. Luce, Ashtabula Co, O.; F. W. Lockwood, Fairfield Co, Ct.; Chas. M. Kinne, Onondaga Co, N.Y.; H. S. Gold, Washington, Ct.; Isaac Tucker, Queen's Co, N.Y.; W. W. D. Mass.; Mary Campbell, Delaware City, Ind.; Fremont M. Hendrix, Howard Co, Mo.; John Oliver, Brooklyn, L.I.; J. Conklin Brown, Dutchess Co, N.Y.; W. M. Murtry, Windham, N.J.; David W. Sharp, Seymour, Ct.; J. G. S. Guthrie, Somerset Co, N.J.; H. F. Carter, Crawford Co, Pa.; F. C. Bissell, Tolland Co, Conn.; Jno. Souther, Richmond Co, O.; Jacob Corlies, Monmouth Co, N.J.; Mary E. Lodge, Montgomery Co, Pa.; Mary Y. Stout, Ringoes, N.J.; H.

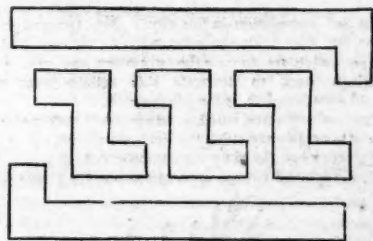
I. Jones, Grant Co, Ind.; B. D. Sanders, Brook Co, Va.; R. W. Anderson, York Co, Pa.; Joseph W. Farquhar, Carroll Co, Md.; G. H. La Petra, Clinton Co, O.; J. S. Parent, Saratoga Co, N.Y.; J. G. and P. S. Guthrie, Decatur Co, Ill. (different from figure above); Emma Wooley and Louis Pennington, Ripley Co, Ind. (do.); Chas. D. Morris, Bureau Co, Ill.; Lester Winfield, Ulster Co, N.Y.; Andrew Beck, New Durham, N.J.; R. G. Adams, Worcester Co, Mass.; Robert Wina, Hawesville, Ky.; W. E. Guy, Oxford, Ill.; Martin D. Young, Clinton Co, Ind.; G. P. Prindle, Charlotte, Vt.; J. F. Coffin, Hancock Co, Ind. The next thought they were correct; but their figures were parallelograms instead of squares: G. W. T., Ct.; E. W., N.Y.; A. W., N.J.; W. E. J., Wis.; J. H. B., N.J.; J. D. S., O.

Prob. 28—Miscellaneous Enigma. (See page 90) Ans.—The motto of the *Agriculturist*—"Agriculture is the most healthful, the most useful, and the most noble employment of man." Words: Peoria, Fortune, And, Emily, Lilac, Elm, Albany, Table, Hudson, Otter, Fig, Us, Meat, Fish, Temple, Hoe, Cottage, Arithmetic, Moses, Home.

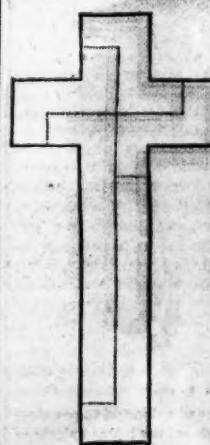
#### Answered correctly by:

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Prob. 29—To arrange the following five pieces into a perfect cross:



This is done in the following figure, and drawings like this have been received from: John Souther, Richmond



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NATHANIEL ORR

### A Further Talk with the Boys and Girls about Engraving.

On page 59 (Feb.) we gave our young readers some account of "how pictures are made," which seems to have much interested them, and the older people too, and a great many of them are in a hurry to have us fulfil our promise to ask Mr. Orr to talk more on the subject. One who calls himself "an old boy, only 74 years of age," writes that "he reads the Boys and Girls columns the first thing in the *Agriculturist*, and enjoys them much, because he there finds the things that would also have interested him in his other boyhood." He further says: "I know the Editor has been a farmer's boy, for he gives the boys and girls just such information as they wish but cannot find elsewhere." But this by the way—Well, we did ask Mr. Orr, but he is a modest man, and preferred to let us do the writing, though he would willingly do anything to interest and instruct the young folks. (Would you not think so when you look at his countenance, which we take the liberty to insert on this page without asking his consent, as we obtained this good picture of him from an Art Association in this city?) Mr. Orr and his partner, Mr. Wood, kindly went with us through their rooms, allowing us to quiz the workmen, and pick up engravings used to illustrate this article—some of them they made specially for this purpose.

Engraving is done on wood, on stone, on copper, and on steel: On copper and steel, the lines are simply cut into the surface, when the plate is smeared over with ink, and this is all wiped off except what remains in the places cut



Fig. 1—THE STAG.

out. The paper is then laid on and subjected to powerful pressure, which causes it to pick out the ink remaining in the lines.

Lithographing is different from engraving. In this process, no cutting is done, but an oily ink is used for putting on

the lines upon a peculiar kind of stone. The stone is then wet and an ink roller passed over. As the stone is all wet except where the oily lines are upon it, only those places take the ink, and give it off to paper when pressed upon it. To print in Lithograph, or on copper or steel, is a slow process, and since electrotype copper duplicates have been invented, most of the work formerly done on copper, is now first done on wood and transferred to copper. Messrs. N. Orr & Co. are now executing large amounts of work for Government, which was, until recently, done on copper plate, no better, and at many times the expense.

Common coarse engravings are made on maple or mahogany; and large show-bills when engraved are even cut on pine, but all the finer wood engravings are upon a very hard box-wood brought from Turkey. Box-wood trees are usually small, but several pieces are glued together when a large block is wanted. The box-wood logs are sawed across into pieces just the length of printers' type. One side is then made very smooth and whitened by rubbing a moistened enamelled card upon it.

An artist then draws upon it just the lines, marks, &c., that are to be printed. This is done with pencils or India Ink. The drawing or designing is a distinct art from engraving. We found half-a-dozen

or more of these designers at work and learned that some excel on one kind of drawing, and others in other kinds—some succeeding best at landscape drawing, some at machinery, &c

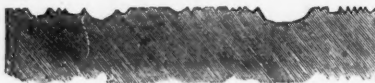


Fig. 3.

In the simplest kinds of engraving, the workmen merely cut away the wood, leaving the black lines remaining. We split an engraved block and looking upon the side of it the top appeared like figure 3. You can see the various points projecting upward to receive ink for printing. In fig. 2, we give a side and end view of the point of one of the tools used for cutting away the block. As we have



Fig. 4—SHEPHERD'S DOG

before explained, many lines are so small that the engraver has a magnifying glass placed on a frame between his eye and the block he is cutting.

Many of the drawings, are simply uniform colors, as clouds, shading, &c., and here the engraver must exercise his skill to leave such points on the wood as will give the expression. Thus, you will see in figs. 1, 4, 5, and 6, very different kinds of lines to express the hair on the Dog and Stag, and the two kinds of feathers on the Wood Lark and Teal. To give these various expressions or tints correctly, requires not only skill and judgment, but long experience. To be a first class engraver a man requires something more than mechanical skill—he must have a talent for it, and this is the reason why there are so few first class engravers, as there are few real sculptors, painters &c.

You will see, then, that this Art is one to which machinery can never be applied in most of its details. Regularity would spoil almost any fine engraving. There are, however, certain kinds of "tinting" which a machine can do. Mr. Orr has an ingenious machine with which he cut figs. 7 and 8 before our eyes, and in very little time. He also cut for us on this machine, the tinting

in fig. 9. This is done with a kind of little plow which is passed over the block and given a vibrating motion as it moves along. The same machine can be changed to cut many different tints. The white letters of the name are cut out with the tools shown in fig. 2. This machine



Fig. 5—WOOD LARK.

is much used for tinting bank checks, drafts &c. Just now it is applied to preparing blocks to print the whole outside of letter envelopes. A man's business card can be printed on tinted ground upon an envelop, so lightly, that the superscription or direction of the letter can be written right over the printing. These envelopes printed in buff, and other colored inks, are very beautiful

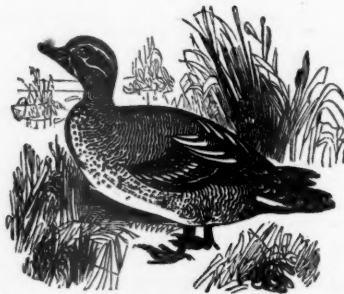


Fig. 6—THE TEAL.

There are many things connected with the art of engraving which we have not room to tell you of—but we know it will interest you to learn as much as possible of an art which contributes so much to your pleasure by exhibiting to the eye the appearance of plants, implements, and a thousand other things you have not seen and may never

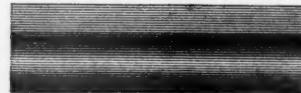


Fig. 7.

see. One thing more we must tell you of, however. You will see that much depends upon the artist who make the first draft or picture of a thing. Until recently, this has in all cases been put upon the engraver's block with pencil and brush. But now they are beginning to make

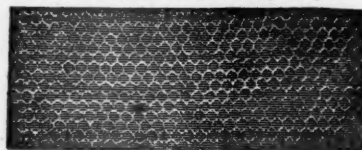


Fig. 8.

daguerreotypes, or rather photographs of objects directly upon the surface of the wood itself. Thus, the portrait above, was first pictured right upon the prepared surface of a boxwood block, and the cutting done immediately by an engraver. You will readily see that the outlines must



Fig. 9.

thus be more perfectly obtained, than if drawn by the eye with a pencil. Some of our pictures of trees, plants, flowers, and implements are thus obtained. The only difficulty in this process now is, that the surface of the wood must first be colored dark before applying the silver



solution for the photograph, and this prevents the engraver from seeing well how to cut very fine lines when required.

### The Long White French Turnip.

Just as we go to press, we ascertain that we can get some of the seed of the turnip, described on page 134, and we therefore offer it as No. 4 of our Extra Premiums presented to those who procure and send in new subscribers after this date. This premium, by the way, is worthy attention. The amount of seed offered, with careful planting, will suffice for full one eighth of an acre. It may be late in the year to secure new subscribers (and this is one reason for giving at this season extra premiums not before offered). But "the times" are getting better, and many persons can subscribe now, who could not do so earlier. The person using a little effort now will accomplish a three-fold object; first, get the premium himself; second, benefit the person induced to become a reader of an agricultural journal, and third, promote the interest of the *Agriculturist* itself, since every dollar added to its finances furnishes additional means for improving its value to the reader.

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#### Premium No. 2.

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#### Premium No. 3.

We still continue the offer of this valuable Premium, consisting of 18 varieties of new seeds, sent post-paid for new subscribers, at \$1 each. For list and amount of seeds, and terms of Premium, see last page of April *Agriculturist*.

#### Premium No. 4.

To any person obtaining a new subscriber for 1858 (vol. 17), after May 1st, we will, in return for the favor, send (post-paid) an ounce package of the seed of the Long White French Turnip, described on page 134 of this number. An ounce will be given for each new name. The new subscriber will himself be entitled to select the usual packages of the seeds, Nos. 1 to 52, offered in our February number. The names may be sent at \$1 each (or at club rates when for new clubs or additions to those already formed); but when the seed is to go to Canada or to the Pacific Coast, 14 cents additional will need to be sent to us for extra postage on each ounce of seed forwarded.

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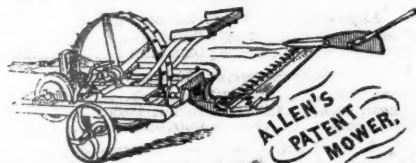
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FOR PRESERVING MEATS, FRUITS, VEGETABLES, the products of the Farm and Dairy, and all perishable articles, WITHOUT DAMAGE from heat and moisture in SUMMER, OR COLD IN WINTER.

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It is known to the public that I have, for many years, been making improvements on various farm implements, and I may safely claim to have learned something from experience.

Ever since the exhibition of machines before the U. S. Agricultural Society at Syracuse, (it could not be called a trial, but more properly a race,) I have been busily engaged in re-modeling and perfecting my Mower; and to do this understandingly, I have carefully examined the construction and operation of all the best machines in the market. I have studied and compared their various parts and working qualities many of them excellent in some respects, but all deficient in others.

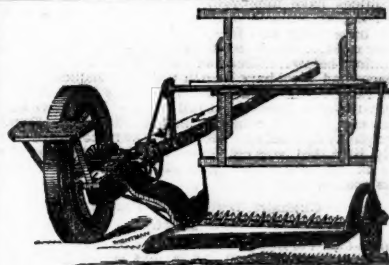
To produce a machine comprising all the requisites for perfect work, in the simplest form, has been my aim; and it is a trite remark that the easiest way to do a thing well, is the last found out. I think the Mower now offered to the public an illustration of the fact, and will be found on trial.

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THE SIMPLE MOWERS have wrought-iron frames, with all of the other improvements except a Reel. With these improvements the draft of the KETCHUM Machine is as light as any machine known, and by the test with the Dynamometer at Syracuse, by the U. S. Ag. Society last July, the draft of the Reaper was more than one-quarter less than any other of the 12 Reapers on trial. This result is obtained by enlarging the main wheel for Reaping, which lessens the motion of the knives and the actual draft of the machine fully one-quarter.

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Sizes and Kinds. Harrows—Field and Garden Rollers, Seed and Grain Drills—Wagons—Carts—Wheel Barrows—Forks Hoes, &c., &c. Horticultural Tools—Pruning Shears and Knives—Lawn Rakes and Scythes—Pruning Saws and Hooks, &c., &c. For Sale by R. L. ALLEN, 191 Water-St., New-York.

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tures for hulling clover seed, also Mills for crushing the Chinese Sugar Cane. For Circular write to W. W. DINGEE & CO. York, Pa.

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No. 1 Press—Weight of Bale 150 to 200 pounds.

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is one of the best things for plowing rapidly all kinds of land except "breaking up." Also for plowing in seed. A team goes over a large surface in a day. It is all iron, guides itself, cuts three furrows at a time, and does the work finely.

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Manufactured under Letters Patent of September, 1856.

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WAREHOUSES, Barren Island, Foot of 45th st., East River.

THIS PREPARATION, ONE OF THE

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In offering this valuable Fertilizer to the public, I would state that I have arranged for all the dead Animals, Blood and Offal of the city of New-York, which will secure to me a constant and ample supply of Animal matter from which, by my Patent Process, I produce the Phosphates and Salts of Ammonia which form so valuable a part of this preparation.

The Manufacture of the Fertilizer being under the special and immediate direction of a practical Chemist, and my facilities for obtaining the necessary amount, kind and quality of the materials, enables me to guarantee to the public a uniform and reliable article.

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20 per cent of pure Ammonia;  
25 " Phosphate of Lime;  
45 " Organic Matter.

All applicants will meet with prompt attention, if addressed to JOHN A. SCHWAGER, New-York.

N. B.—The above article may also be obtained at the Manufacturer's prices, of R. L. ALLEN, 191 Water-street, and other Agricultural houses in New-York.

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THE LODI MANUFACTURING CO. offer 70,000 barrels of their new improved Poudrette for sale the coming season. It is now well known as the best fertilizer in market for Indian Corn and kitchen gardens—is perfectly harmless when applied next to the plant, and yet quick and powerful in its effect. A pamphlet with instructions for its use, certificates, &c., will be forwarded, free of cost, to any person sending their address. The L. M. Co. have a capital of \$100,000 invested in this business, and a reputation of 17 years to keep up—this is some guarantee for a good article. Price as usual, \$1 50 per barrel for any quantity over 5 bbls.; 1 bbl, \$2 00; 3 bbls, \$5 00; 5 bbls \$9 50; free of cartage or other expense. Address THE LODI MANUFACTURING CO., 60 Courtland-st., New-York.

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Superphosphate of Lime—Poudrette—Lime Plaster—warranted of best quality. For Sale by R. L. ALLEN, 191 Water-St., New-York.

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## Market Review, Weather Notes, &amp;c.

AMERICAN AGRICULTURIST OFFICE.

[NEW-YORK, April 24, 1858.]

THE WHOLESALE PRODUCE MARKETS have exhibited some changes of more or less importance, during the month. The receipts of Breadstuffs have increased over those of the previous month, and the available supplies of Flour and Wheat have been, at least, equal to the requirements of buyers. Prices have fluctuated slightly; closing however, with a downward tendency. Corn and Oats have not been as plenty as they were needed, and they have advanced. The demand for Breadstuffs has been good for home use, and moderate for export. Canal navigation has not been fully resumed yet, and it is said the leading Canals cannot be opened for active business before April 26th. Meanwhile, the supplies of Produce awaiting purchasers at Buffalo are accumulating, and it is anticipated that the receipts at the seaboard will be largely increased in the course of three or four weeks from the time of the general resumption of Canal navigation. Cotton has been in fair request, at buoyant prices. Our available supply is 62,710 bales, against 81,532 bales, same period last year. The receipts of all the shipping ports, to latest dates this season, have been 2,597,251 bales, against 2,706,414 bales to the corresponding period last season. The total exports from the United States so far this season have been 1,714,913 bales, against 1,704,913 bales the same date last season. The total stock on hand and ship-board in all the shipping ports, at the latest dates, was 695,744 bales, against 473,975 bales at the same time last year. The stock in the interior towns, at the latest dates, was 98,139 bales, against 60,180 bales at the corresponding date a year ago. An active inquiry has prevailed for the leading kinds of Provisions, in part for future delivery, and prices have improved. Hay opened heavily and languidly, but it closes with renewed vigor. Hemp and Hops have been less freely offered and purchased at former rates. Grass seeds have been very quiet at our quotations below. Rice has been in good demand. Tobacco and Wool have been in moderate request at uniform rates. Rio Coffee has been very freely dealt in, chiefly towards the close, at full prices. Teas have been in fair supply and demand, at unchanged figures. Sugars were plenty and heavy. Molasses was rather quiet and stuffily held, but was not active. Other articles of produce have presented no important variation from the previous month.

## CURRENT WHOLESALE PRICES.

	March 26.	April 24.
Flour—Com'n to Extra State	\$4 25 @ 4 60	\$4 15 @ 4 50
Common to Fancy Western	4 30 @ 4 55	4 15 @ 4 45
Extra Western	4 35 @ 7 00	4 30 @ 7 00
Fancy to Extra Genesee	4 35 @ 7 00	4 35 @ 7 00
Mixed to Extra Southern	3 75 @ 3 25	4 35 @ 7 00
Rye Flour—Fine and Super	3 00 @ 3 75	3 00 @ 3 60
CORN MEAL	3 00 @ 3 50	3 50 @ 4 00
WHEAT—Canada White	1 18 @ 1 35	1 15 @ 1 35
Western White	1 18 @ 1 50	1 15 @ 1 45
Southern White	1 25 @ 1 50	1 18 @ 1 45
All kinds of Red	1 00 @ 1 25	98 @ 1 25
CORN—Yellow, new	66 1/2 @ 69	76 @ 77
White, new	66 @ 68	74 @ 75
OATS—Western	44 @ 46	46 @ 49
State	48 @ 49	46 @ 49
Southern	25 @ 35	38 @ 46
RYE	68 @ 70	68 @ 70
BARLEY	60 @ 70	69 @ 70
White Beans	1 31 1/2 @ 1 37 1/2	1 35 @ 1 37 1/2
Black-Peanut, per 2 bush	3 12 1/2 @ 3 25	3 20 @ 3 25
HAY, in bales, per 100 lbs.	45 @ 65	50 @ 75
COTTON—Middlelings, per lb.	11 1/2 @ 12	12 1/2 @ 12 1/2
RICE, per 100 lbs.	3 00 @ 4 00	3 25 @ 4 25
Hops, per lb.	4 1/2 @ 5 1/2	15 @ 18
PORE—Mesa, per bbl.	16 65 @ 16 70	18 10 @ 18 20
Prime, per bbl.	13 50 @ 15	15 00 @ 15
BEEF—Repacked Mess.	12 00 @ 13 50	12 50 @ 14 00
Country mess	10 00 @ 11 00	10 25 @ 11 25
" prime	7 00 @ 8 00	7 50 @ 8 25
Hogs, Dressed, per lb.	6 1/2 @ 7 1/2	11 1/2 @ 11 1/2
Lard, in bbls, per lb.	9 1/2 @ 10 1/2	12 @ 12
BUTTER—Western, per lb.	14 @ 20	12 @ 20
State, per lb.	17 @ 24	18 @ 28
CHEESE, per lb.	8 @ 10 1/2	7 @ 9
Eggs—Fresh, per dozen	14 1/2 @ 15	11 @ 12
FEATHERS, Live Geese per lb.	40 @ 45	40 @ 47
SEED—Clover, per lb.	7 @ 8 1/2	7 @ 8
Timothy, per bushel	2 00 @ 2 35	1 56 @ 2 25
Flax, Am. rough, per bush.	none selling	None selling
SUGAR, Brown, per lb.	5 1/2 @ 7 1/2	5 1/2 @ 7 1/2
MOLASSES, New-Orleans, per lb.	31 @ 33	35 @ 36 1/2
COFFEE, Rio, per lb.	9 1/2 @ 11 1/2	9 1/2 @ 11 1/2
TOBACCO—Kentucky, &c. pr lb	6 @ 17	6 1/2 @ 17
Seed Leaf, per lb.	9 @ 35	9 @ 35
WOOL—Domestic fleece, per bbl	27 @ 45	27 @ 45
Domestic, pulled, per lb.	30 @ 32	30 @ 32
HEMP—Undr'd Amer'n pr ton	100 @ 110	100 @ 115
Dressed American, per ton	140 @ 170	170 @ 185
TALLOW, per lb.	10 @ 10 1/2	10 @ 10 1/2
OIL CAKE, per ton	36 00 @ 3 00	36 @ 36
POTATOES—Junes, per bbl.	2 50 @ 3 00	2 25 @ 2 50
Mercers, per bbl.	3 25 @ 4 00	2 25 @ 2 75
Peach Blow, per bbl.	3 50 @ 4 00	3 25 @ 3 50
Carters, per bbl.	3 50 @ 4 00	2 75 @ 3 00
ONIONS—Red, per bbl.	2 00 @ 2 25	1 50 @ 1 75
White and yellow, per bbl.	2 50 @ 4 00	1 75 @ 3 50
APPLES—Russets, per bbl.	3 00 @ 3 50	3 00 @ 3 50
Spitzburgers, per bbl.	5 00 @ 6 00	4 00 @ 5 00
Greenings, per bbl.	4 00 @ 4 50	3 00 @ 4 00
TURNIPS—Kuta bagas, per bbl	62 @ 75	62 @ 75
POULTRY—Fowls, per lb.	10 @ 15	15 @ 15
Chickens, Spring, per pair	10 @ 15	15 @ 15
Ducks, per lb.	18 @ 21	18 @ 21
Turkeys, per lb.	13 @ 18	15 @ 18
Geese, per lb.	9 @ 11	9 @ 11

The total receipts and the total sales of Breadstuffs for 25 business days, ending with to-day, have been as follows:

	Receipts.	Sales.
Wheat-flour, bbls.....	202,000	273,665
Wheat, bush.....	56,250	323,950
Corn.....	672,500	784,000
Rye.....	35,000	61,100
Barley.....	12,500	61,500
Oats.....	66,150	

This statement affords the following comparison of the total receipts and sales in each of the last two months:

	Flour.	Wheat.	Corn.	Rye.	Barley.	Oats.
26 bus. days last mon.	90,124	29,707	682,340	2,531	63,756	
25 bus. days this mon.	202,000	56,250	672,500	35,000	12,500	56,150

SALES.	Flour.	Wheat.	Corn.	Rye.	Barley.
26 business days last month.	257,680	132,650	737,000	15,400	20,780
25 business days this month.	273,665	323,950	784,000	61,100	61,500

The following is a comparative statement of exports of the leading kinds of Breadstuffs from the port of New York, from Jan. 1, to April 19, both days included:

	1857.	1858.
Wheat Flour, bbls.....	279,413	368,582
Rye Flour, bbls.....	1,228	1,903
Corn Meal, bbls.....	14,666	19,384
Wheat, bushels.....	782,410	340,934
Corn, bushels.....	1,324,719	1,062,627
Rye, bushels.....	80,442	

Shipments from Milwaukee, this season, to April 12

Flour, bbls.....	23,600
Wheat, bush.....	10,000
Oats, bush.....	171,700

Shipments from Chicago, this season, to April 19.

Flour, bbls.....	7,153
Wheat, bush.....	184,157
Oats, bush.....	35,132

Stock in store, at Chicago, April 19.

Flour, bbls.....	70,000
Wheat, bush.....	1,154,820
Corn, bush.....	42,107
Barley, bush.....	2,900
Oats, bush.....	63,132
	120,175

N. Y. LIVE STOCK MARKETS—BEEVES—Receipts for four weeks ending April 21, were 11,562; differing but 150 from receipts for the same period last year. The average prices are, however, 3c.  $\frac{1}{2}$  b less now than then. Receipts and variations of prices were, for week ending March 31, (2,792) 1 c. advance; April 7, (2,485) 1 c. advance; April 14 (3,105), 1 c. lower; April 21 (3,180), 1 c. lower, making an advance of 1 c. @ 1 c. since our last report.—April 21, prices ranged on estimated net weight as follows: Premium cattle, 10c. @ 11c.  $\frac{1}{2}$  b; First quality, 10c. @ 10 1/2 c.; Medium, 9c. @ 9 1/2 c.; Poor quality, 8c. @ 9c.; Average of all sales, 9c. @ 9 1/2 c.

SHEEP—Receipts have been even lighter than last month, or only 13,851 head for four weeks past. Prices have advanced to 5 1/2 c. @ 6  $\frac{1}{2}$  c.  $\frac{1}{2}$  b, live weight, for good sheep, and 6 1/2 c. for extra fat animals.

HOGS—Arrivals fair, and prices about as last month, or 5 1/2 c. @ 5 1/2 c. gross for corn-fed hogs, and 5 1/2 c. @ 5 1/2 c. for still-fed hogs.

THE WEATHER.—Thus far the present Spring has been very favorable for fruit prospects, for grass and grain fields, and for preparing the ground and getting in crops. We have had frequent April showers, but no freezing, and farm and garden work have been performed almost continuously.—Our daily notes condensed read:—March 26, clear, mild and dusty; 27, clear A.M., cloudy P.M., light rain at night; 28, moderate rain; 29 to 31 clear and warm.—April 1 to 4, clear and fine growing weather. Farmers plowing, planting potatoes, sowing oats, &c.; 4, clear and pleasant; 5, showery; 6 and 7 clear and very warm; 8, cloudy; 9, thunder showers; 10, clear, pleasant; 11, light showers; 12, 13, heavy N. E. rain, filling cisterns, many of which had become empty during the dry Spring; 14, 15, clear and mild; 16, light rain; 17, clear and fine—peach trees beginning to bloom in the city yards; 18, 19, 20, N. E. rain; 21, cloudy A.M., clear P.M.; 22, clear and fine; 23, fog and light rain; 24 clear and fine.

## Agricultural Editorial Convention.

We call the attention of our contemporaries to the circular on the third page of this paper (p151). So far as there has been opportunity for expression of opinion, the project appears to meet with general favor. It may be found impracticable to agree upon a time and place in season to secure a large attendance this year, but if even a small number get together at first, and break ground, we think good results will follow.

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